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ECONOMIC INTEGRATION AMONG DEVELOPING COUNTRIES: ANDEAN COMMON MARKET AS A CASE STUDY

by

ⓒ M. SHABANY-GHAZVINI

A THESIS
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ABSTRACT

The Andean Group came into existence in 1969. This study represents the first attempt to analyze the effects of economic integration in the Andean Common Market through the use of a highly aggregated model. The time period surveyed in the study is generally from 1960 to 1976, though data for recent years are given where they may be appropriate and are available.

The study first presents a survey of customs union theory as background materials (Chapter II). Chapter III is devoted to a brief criticism of the trade strategies of developing countries and possibilities of economic integration among these countries. In Chapter IV the Andean Group as a case study in economic integration among developing countries in introduced. Chapter V provides estimates of the influence of the economic integration. Chapter VI deals with the analysis of the impact multipliers, whereas the last chapter summarizes the main findings and suggests some implication of the policy making.

ACKNOWLEDMENTS

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CHAPTER I

INTRODUCTION

The literature offers many viewpoints on the negative and positive effects of foreign trade on economic development.[1] What is obvious is that different relationships exist for developed and less developed countries. Historically a positive relationship existed between exports and development, which helped nations in Western Europe and the United States to develop rapidly. It is not so for many developing countries. These countries usually import more than they export. They finance their import surpluses by grants or loans from abroad. Shortage of foreign exchange and balance of payments difficulties are common among them. Their domestic markets are small. They do not have the markets necessary to establish competitive industries. In the past, import substitution has been regarded as the main route to industrialization.

Many developing countries have made little development progress during past decades in spite of outside grants and loans that they have received. In many, the increase in oil prices since 1973 has made the situation even worse. According to the classical theory of international trade, one of the reasons for foreign trade is to take advantage of relatively abundant resources. If developing countries were not able to take advantage of their relative abundant resources individually, they may be able to do so through economic integration.

---

[1] For the detail analysis see Todaro, Michael P., Economic Development in The Third World, (Longman Inc., New York, Second Edition; 1981). Thirwall, A.P., Growth and Development (Second edition, MacMillan Press; 1978). Ch. 14. Meir, Gerald M., Leading Issues in Economic Development (Oxford University Press; Third Edition; 1976). Findlay, Ronald, "Economic Development and the Theory of International Trade" American Economic Review, May 1979.

With the establishment and success of the European Common Market, interest in regional economic integration has become world wide. Some of the known integration schemes are: The European Free Trade Association, The Council for Mutual Economic Assistance, The Latin American Free Trade Association, The Caribbean Economic Community, The Central American Common Market, Regional Cooperation for Development, The Central African Customs and Economic Union, and the East African Community[2].

As it was with foreign trade, the application of economic integration to developing countries differs from developed countries. For less developed countries it is not the potentiality of regional economic integration which counts most. It is the ability to exploit the potentialities which is more important. While the developed nations should be able to improve the performance of their economies through economic integration, for the less developed countries it is actually a question of whether it is possible to create a well-functioning national economy through the progress of economic integration.

A part of the theory of economic integration which is commonly referred to as the "dynamic aspect" suggests that formation of a customs union would increase supply through productivity improvement, economics of scale, and increased competition among producers. Other factors contributing to dynamic efficiency are reduced uncertainty and increased investment. The importance of these factors and the time period over which they will operate depends on the economic, political and institutional features of a specific union. While dynamic gains are continuing increases in output, static gains are a once and for all contribution to the increase in output resulting from integration.

---

[2] For detail description of the members, their impacts, etc. see Nugent, Jeffrey B., Economic Integration in Central America, Empirical Investigation (The John Hopkins University Press; 1974), Ch. 1, pp. 1-16.

In less developed countries where conditions of scarcity of capital and management skills as well as high risk and uncertainty prevail, the mere freeing of trade will not lead to benefits of economic integration. The regional integration of the less developed countries needs much more guidance and planning than that necessary for developed nations. To exploit the potentialities of economic integration among developing nations the establishment of an adequate infrastructure will be a necessity. Expansion of the volume of trade will not be possible without an expanded transportation and communication network. In this framework, then, economic integration will result in more investment. There probably will be more inflow of capital attracted by the larger markets. External vulnerability will be reduced through economic integration. With a regional market the less developed countries would no longer be so dependent on the outside world for their foreign trade. They may even be in a better bargaining position. The combined market, their combined supplies and their combined demands for imports might give them a stronger position in trade negotiations. In other words, through economic integration, what the developing countries may not be able to do alone they may be able to do together.

This study will proceed in the following framework. The next chapter summarizes the theory and research in this area previously performed by others. First, there will be a review of the literature including an analysis of static and dynamic aspects of economic integration. In partial equilibrium analysis, the welfare effect of trade creation and trade diversion are demonstrated separately by use of figures with perfectly and imperfectly elastic supply curves. General equilibrium analysis follows the partial equilibrium analysis. Then, measurement of the total welfare effect of customs union is illustrated. A brief analysis of the factors affecting the net gain of a customs union is followed by dynamic analysis. The last part of the second chapter will focus on the empirical research.

The basic problems related to foreign trade in less developed countries, their commercial policies, static and dynamic costs related to and created by such policies as well as alternative policies are discussed in the third chapter. Finally pro and cons of economic integration among less developed countries are analyzed in this chapter.

In the fourth chapter, the Andean Common Market, its objectives, its mechanism, characteristics of each member, regulations and arrangements concerning trade, investment, etc. among members, the structure of the Andean Pact, and crises and failures of the Andean Pact will be discussed. At the end of the chapter, the major exports, rate of inflation, exchange rate stability as well as basic government policies of members are compared. Due to the special importance of the consolidation phase (1969-1974), the last section of this chapter is devoted to an analysis of this period.

The concepts of trade creation and trade diversion which have been used widely in the literature, and as a basis for research by many cannot be used to judge integration schemes of developing nations because they neglect the most relevant part of the theory to the less developed countries, namely the dynamic aspects. Hence, in the fifth chapter an econometric model is used to provide estimates of the influences of various macroeconomic variables, including the customs union dummy variables, on each of the most important targets in the model. Besides the assessment of the effects of economic integration this chapter analyzes the economies of each member through a highly aggregated macroeconomic model. This chapter will analyze the relevance as well as the degree of influence of each predetermined variable on the macroeconomic variables of each member country.

The purpose of the sixth chapter is to provide reduced form solutions for the model. This chapter will deal with the analysis of policy multipliers obtained from the reduced form solutions.

The last chapter summarizes the main findings and suggests some implication of the policy making.

In the Appendix three matrices, $(I-A)^{-1}$, B and I-A are presented.

CHAPTER II

A SURVEY OF ECONOMIC INTEGRATION THEORY

This chapter is essentially background material. The purpose is to present a survey of customs union theory including an analysis of the welfare impact of trade creation and trade diversion. It also includes a review and critique of existing empirical studies, most of which are measures of the static welfare impact of trade creation and trade diversion.

The concept of trade creation and diversion and the literature on customs unions are familiar to specialists in this field, so it is unnecessary to repeat them. The theoretical literature on customs union examines the effects of economic integration using both partial and general equilibrium analysis. Using partial equilibrium analysis, Viner[1] was the first who viewed the impact of a customs union on the pattern of trade and showed that perferential trading arrangements are not unambigously beneficial. However, he regarded the primary effect of a customs union as being on the supply side. Later, Meade[2] pointed out that a customs union may produce a welfare gain even if its only effect is to divert existing trade. For instance if trade is diverted to a higher cost source there may nonetheless be a gain if consumers pay a lower price for the good. Later Johnson

---

L. Viner, Jacob, The Customs Union Issue (New York, Carnegie Endowment for International Peace; 1950).

2. Meade, J.E., The Theory of Customs Unions (North-Holland Publishing Company, Amsterdam; 1955).

developed a more comprehensive partial equilibrium analysis of customs union[3]. The following three figures and analysis are adapted from him. He showed that the demand for imports increases in member countries for two reasons:

the replacement of domestic less efficient production by partner more efficient production of the same goods (the supply or the production effect) and increased consumption of partner substitutes for domestic goods (the demand side or the consumption effect). Domestic supply and demand functions for a typical product are plotted in Figure 1. QQ'M is the saving of cost on domestic production replaced by imports. R'NR is the gain in consumers' surplus from the substitution of imports for domestic goods. Total gain from trade creation is the sum of two areas QQ'M + R'NR. The effects of "trade diversion" are shown in Figure 2. Before the formation of union, the country imports OS' from the rest of the world. After the formation of the union the member country imports OS from the partner. There is an increase in cost (or loss) of πRTP. This loss must be weighed against the gain from increased total consumption

---

[3] Johnson, H.G., "An Economic Theory of Protectionism, Tariff Bargaining, and the Formation of Customs Unions", Journal of Political Economy, June 1965.

____________, Money, Trade and Economic Growth (Harward University Press, Cambridge, Massachusetts; 1967), Ch. III.

____________, Aspects of the Theory of Tariffs (London, George Allen and Unwin Ltd.; 1971), Ch. 10.

Also see P. Collier "The Welfare Effects of Customs Union: An Anatomy" The Economic Journal, March 1979, pp. 84-95.

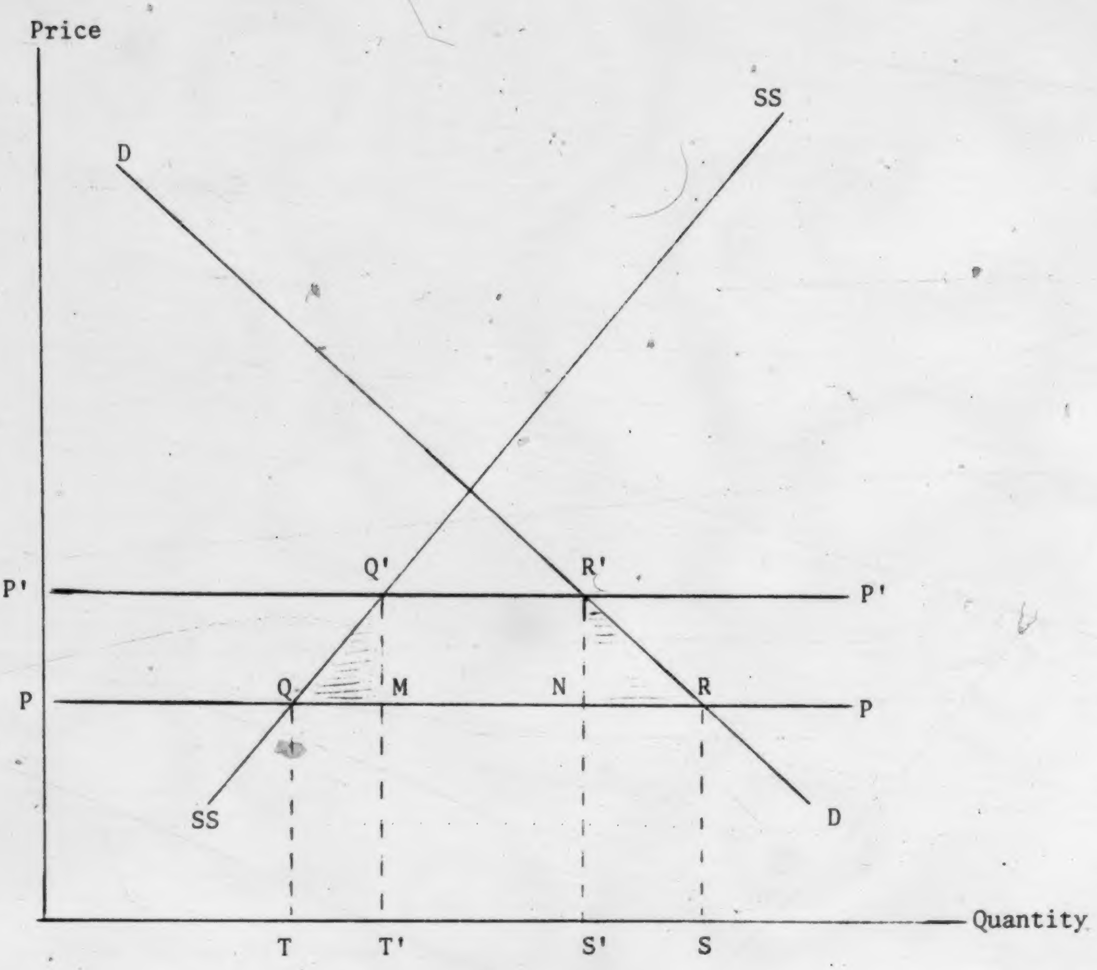
Price
D
SS
Q'
R'
P'
P'
Q
M
N
R
P
P
SS
D
Quantity
T
T'
S'
S

FIGURE 1

TRADE CREATION

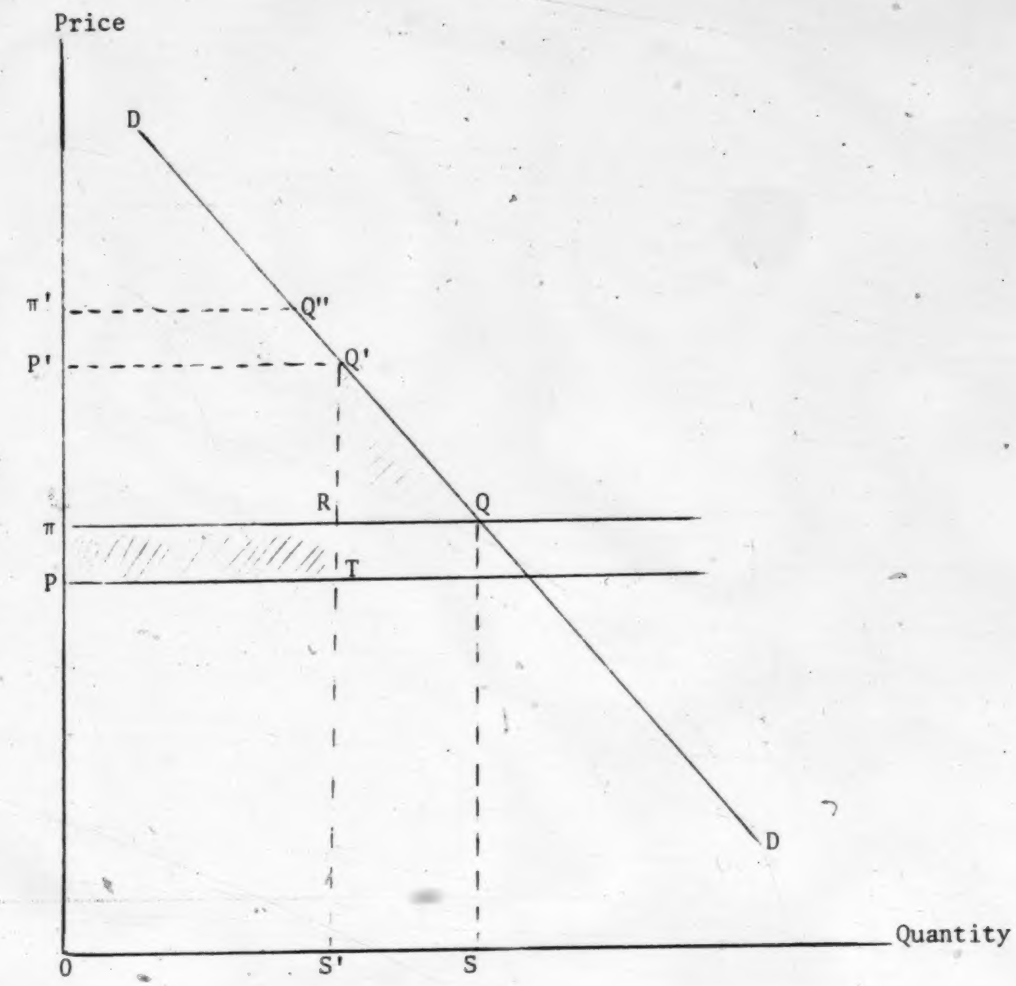
Price
D
π'
Q"
P'
Q'
R
Q
π
T
P
D
Quantity
0
S'
S

FIGURE 2

TRADE DIVERSION

of Q'RQ. Welfare loss occurs as the result of trade diversion only if area πRTP exceeds Q'RQ.[4]

The more realistic case is where import supply is not perfectly elastic. It is illustrated in Figure 3. Sh is home supply and Dh is home demand. Sf is foreign supply. Sp is partner's supply inclusive of tariff. Sp' is partner's supply after the formation of union. Before the union is formed, the equilibrium price is oP_1 and consumption is P_1C. P_1A is produced domestically. AB is imported from the rest of the world and BC is imported from the partner country. With the formation of the customs union, the aggregate supply curve for the commodity is $Sh + Sf + Sp'$ rather than $Sh + Sf + Sp$ and price falls from oP_1 to oP_2. Consumption increases from P_1C to P_2D. Domestic

---

[4] Formation of a customs union causes intercountry substitution, intercommodity substitution and terms of trade changes with the rest of the world. The intercountry substitution results in trade creation and trade diversion each of which contains a production and a consumption effect. See P. Colleir op.cit. Here the shifts that increase efficiency are simply labelled as "trade creating" and shifts that reduce efficiency are called "trade diverting". Trade creation occurs when the elimination of customs duties between countries leads to a shift in production from inefficient (or less efficient) protected firms to more efficient firms within the union. Trade diversion occurs when goods formerly imported from the rest of the world are replaced by goods produced within the union by less efficient producers. In the above analysis (Figure 1) QQ'M is Viner's trade creation, production effect, and R'NR is Meade's "trade expansion", distinguished from Viner's trade creation, or consumption effect of trade creation.

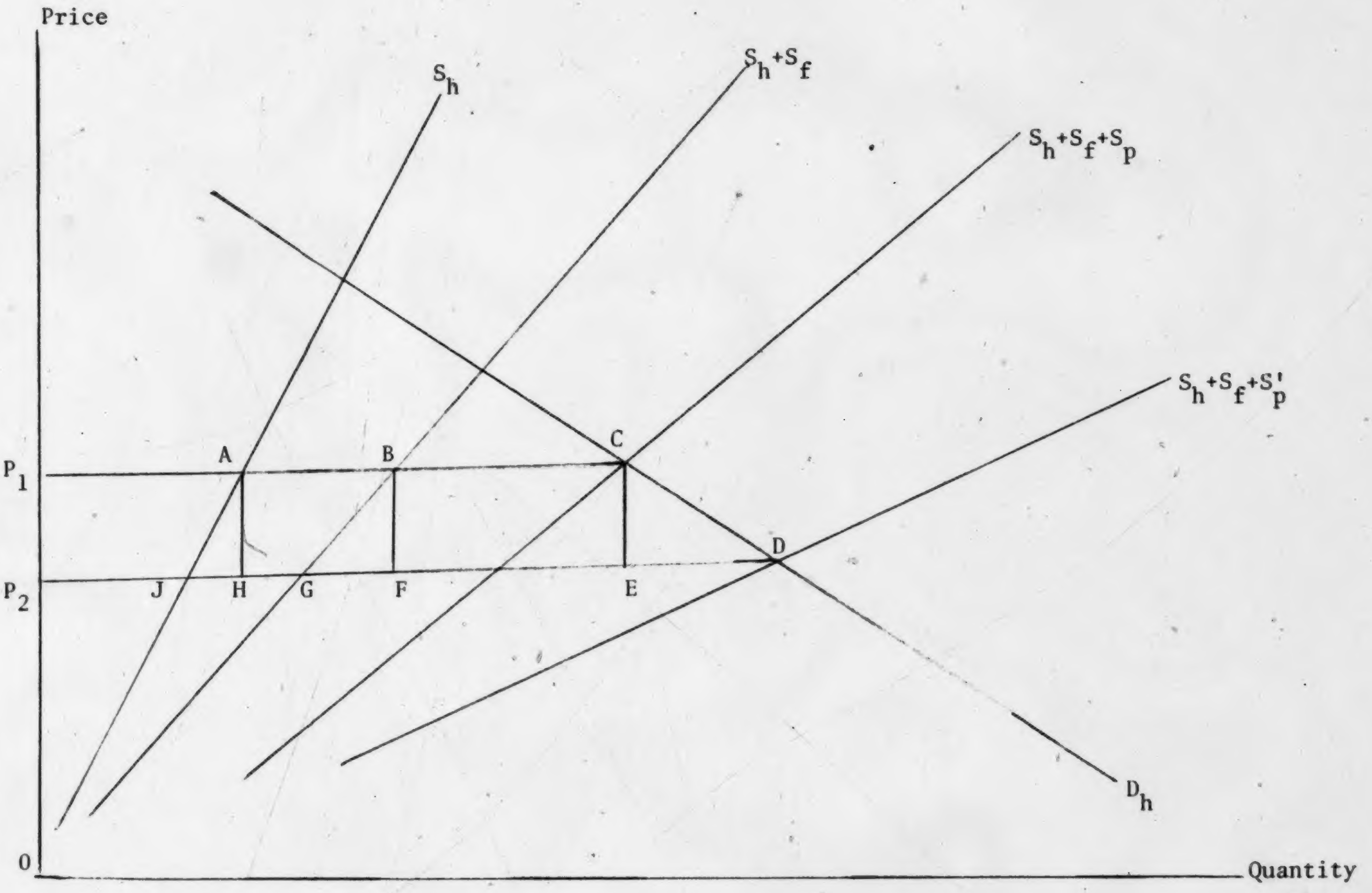

Figure 3
The Case with Inelastic Supply

production is reduced, so are imports from the nonmember countries. On the other hand imports from the partner increase from BC ≡ EF to GD. The increase in imports from partner is the sum of trade creation and trade diversion. HJ is trade creation. There is also increase in consumption resulting from the fall in price (DE). (GF-JH) represents trade diversion.

In brief, the home country imports some of the product from the foreign and partner countries as well as producing a proportion itself both before and after the formation of the union. The union changes the mix. On balance each member may gain or lose. There is reduction in producers' surplus and in tariff revenue. The country pays a higher price for goods in case of trade diversion (an increase in the partner's supply price as output is increased)[5]. On the other hand there is gain in reallocation of resources away from high cost domestic production. There is a gain of consumers' surplus.

---

5. There is also some loss from increase in price on the former volume of imports from the partner on previous quantities now supplied at a higher price. Against this loss on the partner terms of trade there is possibility of an improvement in the terms of trade with the rest of the world if the union is large enough to affect its terms of trade. Another possibility is export diversion especially when there is foreign exchange constraint on the part of the foreign country.

In a general equilibrium framework[6], the welfare effect of the customs union can be explained by Figure 4. Starting from free trade equilibrium in position e (Figure 4), the imposition of tariff on imports of X, even it it does not shift the source of country A's imports, will cause a reduction in the quantity of these imports and an increase in the consumption of the domestic commodity Y. The tariff changes the relative prices in A's domestic market indicated for example by the slope of line A'C', moving A's equilibrium from e to h. Now if A forms a trade-diverting customs union with country B. and buys her imports of X from B at terms of trade indicated by the slope of line AB, her welfare will be unchanged. Country A's welfare actually will increase if her terms of trade are worse than those indicated by the slope of AC but better than those indicated by the sloper of AB, for instance line AD. If terms of trade is between the slope of AB

---

[6] For general equilibrium analysis including the two-aggregate analysis, the three aggregate analysis and the ideal level of aggregation and related problems see

Lipsey, R.G., "The Theory of Customs Union: A General Survey" in Readings in International Economics, edited by R.E. Caves and H.G. Johnson (Richard D. Irwin Inc. 1968), Ch. 16.

__________, The Theory of Customs Unions: A General Equilibrium Analysis (London: Weidenfield, and Nicolson; 1970).

P. Collier "The Welfare Effects of Customs Union: An Anatomy" The Economic Journal, March 1979.

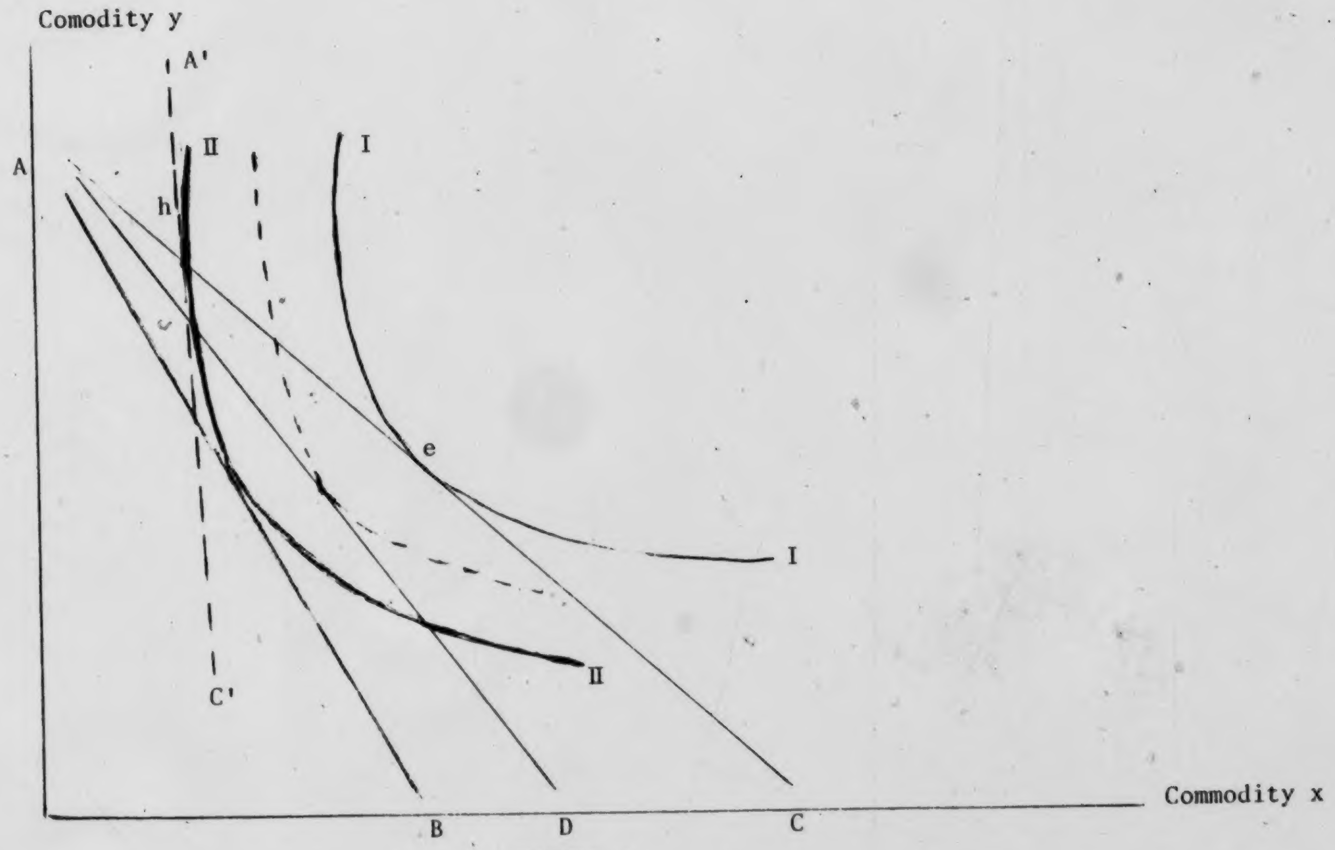
Comodity y
A'
A
II
I
h
e
I
II
C'
Commodity x
B
D
C

FIGURE 4

General Equilibrium

and AC, A's welfare will be increased by the trade diverting union. In brief, a customs union may produce a welfare gain even if its only effect is to divert existing trade, the same result as in a partial equilibrium analysis.

As a method to measure the total welfare effect of a customs union, Figure 5 is used. ab is the amount of trade creation. Area B is the total reduction in costs as inefficient domestic producers reduce their output. The gain due to consumption effect is area D. The loss from trade diversion (area E) is determined by multiplying the difference in cost per unit of the partner and foreign sources (P_1P_2) by the amount of trade diversion, which is amount bc.

As the union is formed, domestic production is reduced from ob to oa (production effect of trade creation). On the first unit, the welfare gain is the full difference between the domestic and partner prices. On subsequent units the gain is smaller and is eventually zero. The same is true in the movement from oc to od. For trade diversion this is not the case. The loss per unit is constant throughout because the cost differences remain constant for trade diversion. In practice, the process of determining whether economic integration produces a net welfare gain or loss is much more complicated than is revealed in this analysis even if we were able to determine the volumes. The determination alone requires a knowledge of precise cost differences between countries for a wide range of products. What can be said in addition is that the static analysis alone is not sufficient for the determination of net welfare gain or loss.

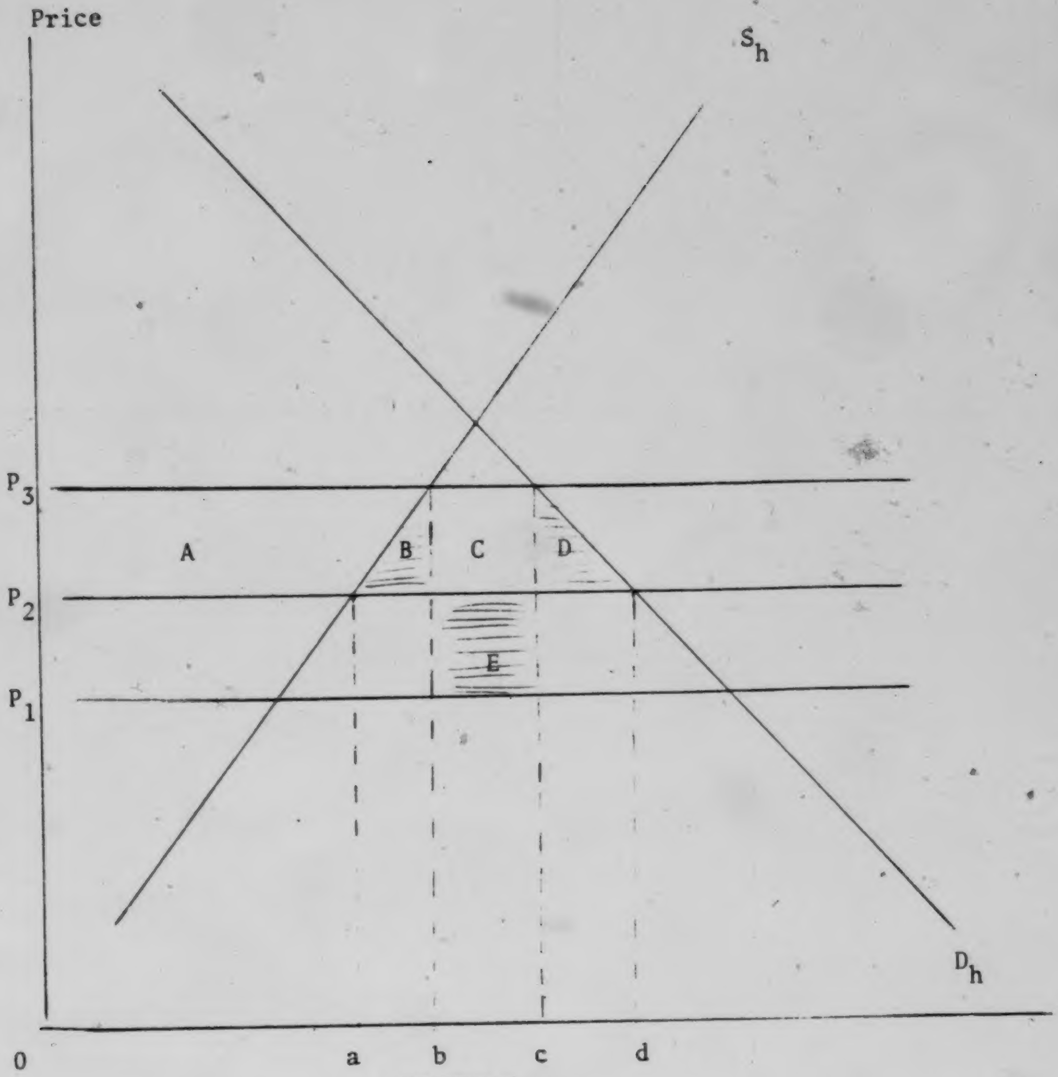
Price
S_h
D_h
P_3
P_2
P_1
A
B
C
D
E
0
a
b
c
d

FIGURE 5

Total Welfare Effects

A given customs union is more likely to produce a net gain:

1. the larger the economic size of the union;
2. the lower the tariff level of the union on imports from the rest of the world;
3. the higher the pre-union tariffs among members before the integration; and
4. the more dependent the rest of the world on the member economies.

A customs union is more likely to be advantageous on balance if the economies of its members are actually very competitive but are potentially complementary. If before the formation of union they produce similar products but efficiencies differ, then after integration trade creation will dominate trade diversion. Consider two countries, one with a comparative advantage in production of primary products and the other in manufacturing goods. The primary producer has by protection developed some high cost manufactures and the manufacturing country has by protection developed some high cost domestic agricultural products. If they form a union, their welfare will increase considerably since one will concentrate on producing cheap primary products and the other producing cheap manufactures. There is possibility of a great expansion in their trade without much diversion of their imports or exports from the rest of the world. If on the other hand, their economies are already complementary the prospects of gains on the production side would be small.

To measure the welfare effect of a customs union, we also have to consider the terms of trade effects. The welfare gain will be high if the elasticity of the reciprocal demand for outside products is high,

✓

but the elasticity of reciprocal demand of the outside world for products of members is low. In other words, the more inelastic is the foreign supply of imports to the union and the more inelastic the foreign demand for its exports, the higher is the possibility of gains on the terms of trade with the rest of the world. In all these cases we are actually discussing the possibilities. In practice the measurement is far more complicated.

So far our analysis has been concentrated on the so-called static effects. The possibilities of the so-called dynamic effects are greater in larger unions. It is expected that integration will foster the economic growth of the members. This outcome is assumed to be due to many factors, such as large-scale economies of a wider market, lessening of uncertainty in intra-area trade, and a faster rate of technological change. Larger markets permit the exploitation of economies of scale. However, it can be argued that once the economies of scale have been exploited the effect is exhausted and thus it is really static in character. With respect to the possibility of economies of scale, even though such economies reduce cost of production inside the union, that cost may still be higher than the cost of supplies formerly imported from outside the union. However, the creation of a customs union should diminish the likelihood of shortages and bottlenecks in production and therefore will enable demand to exert its stimulating effect more fully on output and employment. Integration may lead to the breaking up of national cartels and the establishment of competition. The enlargement of internal markets brings more widespread and effective competition between firms and industries. However, there is possibility of replacement of national by union cartels.

The assumption that countries of different income levels, culture and social background (particularly) can simply be lumped together is very important. If the separate markets of the members are divided by serious geographical barriers which require high transportation costs to overcome them, the enlargement of the market may not be that effective.

Empirical Research

The empirical research analyzing customs union effects over the past decades has concentrated ~~on the~~ trade creation-trade diversion question, constructing estimates about the effects of union on trade flows. The elasticity approach to the estimation of trade creation and diversion which was originally proposed by Balassa[8] has been a comparison of ex post income elasticity of import demand for extra and intra-area trade before and after the formation of the customs union, under the very strong assumption that income elasticities would have remained unchanged in the absence of common market[9]. In other words the establishment of customs union is regarded as the only major influence on changes in the pattern of members' trades[10].

---

[8] Balassa Bela, "Trade Creation and Trade Diversion in The European Common Market", The Economic Journal, March 1967 (pp. 1-21).

____________, "Trade Creation and Diversion in the European Common Market: An Appraisal of the Evidence" in Balassa B. Editor, European Economic Integration (North-Holland/American Elsevier; 1975), (pp. 79-117). This book contains a number of empirical tests on the effects of unions especially EEC, on trade flows.

Williamson and Bottril[11] attempted to predict the level of intracommunity trade flows in manufactures in the absence of integration and compare it with the actual recorded flow for EEC and EFTA. Most of the methods used, since the sixties, to measure integration effects have one thing in common and that is concentration on the impact of integration on the flow of trade, ignoring other aspects[12]. For developing

---

9. In Balassa's study expost income elasticities of import demand are defined as the ratio of the average annual rate of change of imports to that of GNP. A rise in the income elasticity of demand for intra-area imports would indicate (gross) trade creations. Trade diversion would be indicated by a decline in the income elasticity of demand for extra-area imports. The possible effects of the common Market's establishment on economic growth of members are disregarded completely.

10. Although Balassa's study was based only on import elasticity, his method could be applied to export elasticities as well.

11. Williamson, John and Bottril, Antony, "The Impact of Customs Union on Trade in Manufactures", Oxford Economic papers, Nov. 1971 (pp. 323-335).

12. Among these are the so-called cross section models. See for instance Aitken, N.D. "The Effect of the EEC and EFTA on European Trade: A Temporal-cross Section Analysis", American Economic Review, Dec. 1973. For a survey of methods and measurements see Verdoorn, P.J. and Van Bochove, C.A. "Measuring Integration Effects: A Survey", European Economic Review 3 (1972), pp. 337-349.

countries, many studies have been carried on to determine whether growth in intra-region trade on balance has been of the trade creating or trade diverting variety[13]. Most of these studies are based on strong assumptions. The establishment of the customs union is regarded as the only major influence on changes in the pattern of members trade which means that the effects of changes other than those brought about by integration are disregarded. In his study, for instance, W.T. Wilford[14] considers the rise of intra-area trade (as a proportion of total trade) as evidence of the trade creating effects of the Central American Common Market.

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[13] Among these are:

Willmore, L.N., "Free Trade in Manufactures among Developing Countries: The Central American Experience "Journal of Economic Development and Cultural Change, July 1972.

__________, "Trade Creation, Trade Diversion and Effective Protection in the Central American Common Market", Journal of Development Studies 12, no. 4 (July 1976).

Cornoy, Martin, "A Welfare Analysis of Latin American Economic Union: Six Industry Studies" Journal of Political Economy, Part 2 (July/August 1970).

Hazelwood, Arthur, Economic Integration: The East African Experience. New York: St. Martin's Press; 1975).

[14] Wilford, W.T., "Trade Creation in the Central American Common Market" Western Economic Journal, March 1970 (pp. 61-69).

Up to mid 1970's almost all of the empirical research in this area was confined to the impact of integration on trade flow. One of the earliest attempts to assess the impact of integration on each of the economies of the region is Nugent's work[15]. He also has obtained an estimate of the potential improvement that each country could obtain if each member could agree to coordinate its monetary and fiscal policies at the regional level. Later, in a collection of articles Cline and Delgado[16] analyzed the effects of integration on growth, industrialization, employment and distribution of income in Central American Common Market. If we consider economic integration as an important policy option for developing countries faced with choices among economic development strategies, then these studies are turning points in assessing the reliability of integration efforts in fostering economic development.

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[15] Nugent, Jeffrey B., Economic Integration in Central America, Empirical Investigation (The Johns Hopkins University Press; 1974) . Also see Morawetz, David. The Andean Group: A Case Study in Economic Integration Among Developing Countries (Cambridge, Mass. M.I.T.; 1974)

[16] Cline, William R. and Delgado, Enrique, Economic Integration in Central America (The Brookings Institution/Washington D.C.; 1978).

CHAPTER III

FOREIGN TRADE, ECONOMIC INTEGRATION and DEVELOPING ECONOMIES

To many less developed countries the problems involved in relying on foreign trade to stimulate economic development are many and in many respects differ from the past. That is why during the past decades many developing countries have restricted their foreign trade in the hope of promoting their economic development. Many of these countries have later turned to economic integration in an attempt to speed up their development.

As a background for the application of the principles of economic integration to the developing economies, this chapter analyzes trade problems and commercial policies of the less developed countries. This chapter will examine critically the trade strategies and the possibilities of economic integration among less developed countries.

Setting the Problems

The level of domestic aggregate demand is not generally believed to be as important a determinant, in the short-run, of the level of aggregate economic activity in a less developed country as it is in a developed country. Rather the level of income is supply determined. To the extent that demand factors play an important role in the short-run determination of the level of income, they are those orginating from the export sector. Fluctuations in export demand affect the aggregate level of income through their effects on foreign exchange receipts and thus upon available supplies rather than through the multiplier[1]. In those economies in which agricultural exports predominate, supply fluctuations caused by weather, crop-pests and diseases obviously are as important as any demand factor in determining the short-run level of income and welfare. While on the world market, variations in national crop condition will to some extent offset one another, the impact of such supply variations may be significant in individual producing countries. If exports are a significant fraction of national output and export earnings vary considerably then these variations may have a multiplier effect on domestic income with inflationary or deflationary consequences.

The price elasticity of supply and demand in the case of agricultural products is very low[2]. The business cycle in developed countries produces cyclical variations in world demand for primary products. Low price elasticities combined with uncontrolled variations in supply and demand may lead to instability in prices and proceeds of primary products. In other words, due to low price elasticity of supply and demand, relatively modest shifts in world supply or demand can have drastic effects on price.

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[1] The export earnings of LDCS reflect price movements quite heavily, whereas for developed countries it is fluctuations in quantities.

[2] Consider the long lag in the supply response of many primary products to a price change. Consider a product such as coffee for instance. A short coffee crop causes a high price and induces the planting of more coffee trees. By the time the trees reach bearing age the high price might be gone.

So, in the short-run, export instability may reduce the ability of some developing countries to achieve high rates of economic growth; however, in general, export fluctuations have not been an important obstacle to the economic development of developing countries[3].

The other area of complaint by the less developed countries is that there has been rapid technological change in producing cheap and qualitatively superior synthetic substitutes for many agricultural products. The technological advances mean reduced demand for these agricultural products. Research and development efforts in developed countries are also producing means of lowering raw material inputs requirements of those final products using natural inputs intensively. Demand prospects for minerals are generally much better than for agricultural products.

Agricultural protection in the developed countries limits market access of developing countries. One example is the Common Agricultural Policy (CAP) of the European Economic Community. However, estimates show that the transfer of only 20% of existing European revenue on tropical products would provide greater earnings to the producing countries than their total removal. Denmark uses its coffee duty for development assistance with control over the disposal of revenue[4].

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3. In a study done by McBean the results indicate that viewing export instability as a severe deterrent to economic growth in a number of less developed countries is not proven. Alasdair I. Macbean, Export Instability and Economic Development (Georege Allen and Unwin Ltd.; 1966).

4. G.K. Helleiner, International Trade and Economic Development (Penguin Books; 1972), p. 48 and p. 61.

Primary products are still a major source of foreign exchange for developing countries[5]. About one third of all primary products exported from developing countries face trade barriers for the protection of producers in the developed countries. There have been strong doubts in many less developed countries whose exports contain significant amounts of agricultural commodities regarding the advisability of continuing economic dependence upon sales of agricultural products in international markets.

As Table 3-1 indicates, there has been a downward trend in the relative share of exports of agricultural products from developing countries to industrialized countries. For instance imports of agricultural products to EEC have gone down from 12.3% of domestic consumption in 1959-60 to 9.4% in 1973-74. In the case of the U.K. the proportion has declined from 16.9% to 10.1% in the same period and in the U.S. the reduction has been 1.8%. In total the reduction in the share of exports of agricultural product from developing to developed countries has been something around 3%.

Some developing countries have claimed that the terms of trade for primary products have worsened for many decades and will continue to

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[5] In both Chile and Zambia, copper counts for about two thirds of total exports in Egypt cotton is slightly less than half of total exports. In Bangladesh the main export is jute. In Melaysia and Bolivia tin, in Thailand rice, rubber and tin, John P. Powelson "The less developed countries (LDCS) and The Terms of Trade" Economic Impact. No. 22 (1978/2).

TABLE 3-1

Imports From Developing Countries
(In percentages of Total Consumption)

	EEC			United Kingdom			United States			Japan			Total		
	1959-1960	1971-1972	1973-1974	1959-1960	1971-1972	1973-1974	1959-1960	1971-1972	1973-1974	1959-1960	1971-1972	1973-1974	1959-1960	1971-1972	1973-1974
Primary Products	16.4	20.2	28.7	21.4	22.2	31.5	6.6	5.8	9.5	12.9	18	20.1	11.6	13.7	19.5
of which:															
Agriculture	12.3	8.2	9.4	16.9	9.9	16.1	6.3	4.8	4.5	7.8	7.0	5.4	9.4	6.7	6.5
Coal, Crude Petroleum Natural gas	30.8	58.1	70.1	23.3	56.0	70.4	3.7	5.4	19.9	37.7	63.9	76.5	15.9	31.9	50.7
other mining and quarrying	22.3	24.9	27.4	36.0	18.4	22.1	13.2	10.4	13.5	35.4	38.9	36.9	19.3	21.2	24.7
Manufactures	1.5	1.3	1.8	3.6	2.3	3.6	.7	1.2	2.0	1.2	1.1	1.8	1.2	1.3	2.0
of which:															
Textiles	.9	2.3	3.5	5.2	5.2	6.4	1.6	2.8	3.3	.1	1.6	3.1	1.6	2.6	3.6
Clothing	.6	2.8	4.7	3.9	8.8	11.7	.8	4.4	5.8	.7	3.5	8.6	1.0	4.1	6.0
Ferrous & nonferrous metal	5.0	4.9	5.5	3.6	5.5	7.1	1.0	1.5	2.1	4.3	4.7	5.2	2.9	3.2	4.0

Source: UNCTAD, Hand book of International Trade and Development Statistics, 1976.
Reprinted in Finance and Development, September 1978, p. 17.

do so[6]. However, the controversy over historical trends has been concerned with the net barter terms of trade. It is obvious that deterioration in the net barter terms of trade need not be accompanied by declining export receipts if the volume of exports expands sufficiently to offset the relative reduction in price. It does not need to be accompanied by declining income in the export sector, if export productivity goes up sufficiently. If there is deterioration in the net barter terms of trade only, it simply means lower foreign exchange earnings and lower national income than if there were no deterioration.

In the past decades many developing countries have implemented the strategy of trade restriction due to the following factors:

1. the desire for rapid economic growth,
2. the desire for industrialization,
3. the low income and price elasticities of demand for exports of agricultural product which constitute the bulk of the less developed countries exports and
4. balance of payments difficulties.

Import substitution policies often seemed easier to implement than export promotion due to the weak state of the world market for the exports they happen to have. Most of these countries, excluding petroleum exporting countries, have balance of payments pressure due to insufficiently rapid export growth and rapidly rising imports demand to carry on accelerated development programs. Usually trade barriers are pursued for the sake of industrialization (case of infant industry or industries), foreign exchange conservation, to improve balance of payments, to create employment and sometimes even to attract direct investment. Import substitution in less developed countries typically began with manufactured consumer goods for which there is already a local market, which means a shift away from consumer goods imports toward intermediate and capital goods imports. Indeed the post-import substitution economy becomes more dependent on the world economy for intermediate inputs and capital goods required for its development program. It becomes more vulnerable to fluctuations in external receipts than the "traditional" export economy was. So far in most less developed countries the consequences have been the creation of an inefficient industrial sector creating very little foreign exchange savings and little prospect for future productivity growth.[7]

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[6] This argument actually goes back to early 1960's up to mid 70's. That the world's income elasticity of demand of manufactured goods has been much higher than that for the primary products.

A tariff creates spread between foreign prices and domestic prices, but leaves domestic consumers and producers facing the same prices. A tariff, then, stands in contrast to a consumption tax which raises prices to consumers over that faced by producers or to a production tax, which also creates a spread between the prices confronting consumers and the domestic producer. A domestic distortion should be dealt with directly by direct taxes or subsidies at the point of the distortion rather by use of trade intervention. Restriction on import will never be a first-best compensation for domestic distortions in the product and factor markets.

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[7] See Balassa and Associates, The structure of protection in Developing Countries (Baltimore: John Hopkins Press; 1971).

The nominal tariff does not by itself indicate the impact of protection for the domestic industry if that industry utilizes imported inputs which are subject to duty. While the nominal rate of protection affects decisions taken by consumers, the effective rate of protection indicates the joint effects of tariffs on the processing activity, on the product itself and on its inputs and influences the producers' choice.

$$t_e = \frac{t_j - t_i\theta_{ij}}{1 - \theta_{ij}} = \frac{v_j - v_j^*}{v_j^*}$$

where t_e: effective rate of protection

t_j: tariff rate on the final good

v_j: value added in domestic market

v_j^*: value added in world market

t_i: tariff rate on the intermediate good

θ_{ij}: the amount of intermediate good required to produce one unit of final good in value term.

For policy purposes the effective rate of protection can be of great importance in less developed countries. It is possible for the rate of effective protection to be negative. If the numerator is negative, then the process is being taxed rather than protected. When the denominator is negative it means that the domestic production process is extremely inefficient. Negative value added measurement may result from higher international monopoly power on the part of foreign supplies of intermediate goods than that of suppliers of final products and relatively high domestic prices for inputs such as transportation and electricity.

If all manufactured goods are protected, the exchange rate will be lower than it would be in a free trade situation. Exports are penalized by the low (overvalued) exchange rate. Exporters receive less domestic currency per foreign currency than they would get under free trade. To estimate net effective protection then we have to consider the necessary adjustment for the overevaluation of the exchange rate as compared to the free trade situation. Effective rate of protection of 100% on import competing goods and nil on exports will then mean that domestic processing costs are double the world market costs in the first case and equal to world market costs in the second case. So protection permits the profitable operation of import-competing industries that require twice as many domestic resources per unit of foreign exchange saved through import substitution as would be needed to earn a unit of foreign exchange saved through exports. Eliminating protection then entails the transfer of resources from import substituting industries to export industries where their contribution to foreign exchange earnings is twice as large.

Besides the static or allocative cost of protection (distortion in the relative prices of inputs and outputs due to the imposition of protective measure, inefficiencies in resource allocation) there is also a dynamic cost involved in trade restrictions. Economies of scales are foregone as a result of the bias in favor of production for domestic use. The continued sheltering of domestic industry from competition as it is in less developed countries involves a dynamic cost in the form of opportunities foregone for improvements in productivity. Technical change is hindered by the lack of sufficient domestic competition. The small size of the domestic markets limits the scope of application of large scale production methods. High costs in many less developed countries then appear to be the result rather than the cause of protection. In many less developed countries with high level of protection, the smallness of domestic markets has led to the establishment of monopoly positions in some industries. High profits then absorb part of the excess of domestic value added over world market value added. The profits represent a redistribution of incomes from domestic consumers to producers. Protection will involve a cost to the national economy if the firms are foreign owned since profits in that case are transfered abroad.

High levels of protection may affect economic growth in developing countries. Protection usually increases urbanization ~~and~~ an urban population is usually more inclined to limit its birth rate. So protection can affect the rate of natural increase of population. The marginal propensity to save out of profits is higher than out of other incomes. Hence it is argued that any redistribution towards profits due to trade barriers will raise the overall savings, investment, hence the rate of capital accumulation and therefore the rate of growth.[8] However, high levels of protection may not have satisfactory effects on economic growth unless protection leads to net increases in profits that are in turn reinvested. Protection may also reduce the profits of the commercial sector through reducing the volume of trade.

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[8] For detail analysis of relation between growth and protection see W.M. Corden "Protection and Growth" in International Economics & Development, edited by Luis Eugenio DiMarco (Academic Press, New York, London; 1972). Gerald M. Meir, Leading Issues in Economic Development (Oxford University Press; Third edition; 1976) pp. 735-778. Anne O. Krueger "Alternative Trade Strategies & Employment in LDCS.", The American Economic Review, May 1978.

In the case of the infant industry argument, the present (static) cost of protection is accepted for the sake of future (dynamic) benefits which may never appear. When an industry's cost fall over time because of learning by experience, this learning process represents the accumulation of "invisible" capital. An infant industry is an industry that is undergoing such a learning process. Protection shifts the resources from one industry to another. Invisible capital creation goes up but the shift of output imposes a current cost of protection. It is likely to reduce ordinary saving and investment against the increase in invisible capital creation. It is thus possible that protection of infant industries reduces the rate of growth.

The policies of protection with the economic structure that they cause are likely to become barriers to growth in subsequent stages of protection in developing countries. In most of the less developed countries import substitution starts with protection of nondurable consumer goods. Imports of materials, parts and equipments to sustain production in the protected industries go up. So protection causes bias against domestic production of intermediate goods, capital goods and raw material, (since they are usually imported duty free). Protection permits monopolistic or oligopolistic market positions for protected goods which lead to technical inefficiency. There is an increase in foreign exchange requirements of less developed countries to pay for imports of intermediate goods, capital goods and other materials. To carry on an import substitution strategy successfully beyond the first stage requires either expanding exports or extending production backward to materials, equipment and intermediate goods required in import competing industries.

Every direct act of protection of some activity is also an indirect act of discouragement to other activities, except in the cases where the relevant economic resources have been completely idle. A tariff structure which controls imports of consumer goods and lets intermediate products, including capital goods enter freely at the existing exchange rate is discriminatory against:

1. producers of exports;
2. domestic producers of intermediate inputs and capital goods; and
3. consumers.

Import restrictions to stimulate industries have often been prejudicial to the traditional agricultural sector. Overvalued exchange rates due to import substitution hurt agricultural exports by making it less profitable to export. The higher industrial prices caused by protection turn the terms of trade against agriculture. Protection involves a bias against exports in favor of sales in domestic markets in industries classified as import competing or linked to those industries. The extent of this bias has been measured by Balassa[9] by calculating the percentage excess of domestic value added in import substitution over that obtained in exporting. In Brazil, Chile and Phillipines the bias against exports exceeds 100% in most manufacturing industries.

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[9] Bela Balassa and Associates, The Structure of Protection in Developing Countries (published by IBRD and the Intra-Amercian Development Bank; 1971),

If we consider industrialization as a major contributing element in the development process, development of home production to replace imports of manufactured goods was the earlier attempted strategy of industrialization. It is argued that in terms of relaxing a country's foreign exchange constraint, a unit of foreign exchange saved by import subsitution is equivalent to a unit of foreign exchange earned by export. However, the domestic resource cost of earning a unit of foreign exchange through exports tends to be less than the domestic resource cost of saving a unit of foreign exchange through import substitution, recalling the technical inefficiency and other disadvantages of import substitution discussed earlier. Protection limits the scope of introduction of large-scale production methods and provides few inducements for improvement in productivity. In contrast, instead of production on a small scale exclusively for domestic markets, the expansion of manufactured exports enables firms to use large scale production methods. Productivity tends to rise more rapidly in manufacturing than in primary production. We may also say that expansion of manufacturing industries provides indirect benefits by inducing investments in other branches of industry. The expansion of exports can be done by granting a subsidy to the production and exports of manufactured goods or by using differential exchange rates for the manufacturing sector. The nontraditional exports, being relatively labor intensive in production technique, may absorb more labor than import replacement. An export-oriented development strategy generally entails relatively greater use of indirect rather than direct intervention. The costs of export promotion are, however, more visible to policy makers than those of import substitution. The advantage is that exporting firms, however sheltered on the domestic market, still must face price and quality competition in international markets. In discussion of the growth of the export sector, however, the case of immiserizing growth can not be ruled out. In other words, if the terms of trade deteriorate as a consequence of growth, then it is natural to ask whether the deterioration can outweigh the direct benefit of growth. However, we have to notice that such a case exists if the developing country is important enough in world markets to affect the terms of trade.

It is usually believed that the volume of trade in manufacturers of a country with each of her trading partners, when taken as a proportion of the corresponding national incomes of these countries, will be higher, the greater the similarity in the demand patterns of the pair of trading countries. Similarity of demand patterns would be associated with the similarity of income per capita although income distribution and similarities of taste patterns are additional variables. The pre-condition for a non-primary commodity to emerge as an export is usually the presence of home demand because foreign trade is usually an extension of domestic production and trade. The internal demand pattern determines the range of manufacturing commodities that constitute potential exports. Potential volume of trade in manufactured goods will be larger, the more similar the income level of trading countries. If we accept this thesis[10] then there is not much scope for trade in manufacturers between less developed countries and developed countries.

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[10] Linder, Staffan Burenst, Trade and Trade Policy for Development (Frederick A. Praeger; 1967)

Economic Integration Among Developing Counties

During the 1960's and the 1970's many developing countries have turned to economic integration in an attempt to speed up their development. Although integration can vary in degree from free trade area, customs union, common market, economic union to total economic integration, for less developed countries it has been regarded mainly as a way of increasing the size of the domestic market.

As discussed in chapter two, it is assumed that regional economic integration will bring about the growth of the economies of the member nations. In other words, factors such as economies of scale because of larger markets, greater efficiency, etc. will enhance the growth of members. However, while this may apply to developed countries, for the developing countries it is basically a question of wether they will be able to created a well functioning national economy in the first place through such an integration process. On the other hand we may argue that the case for an economic union is weak when the less developed countries have not yet established many industries. In other words, a union will not improve resource utilization unless industries have already been established but need wider markets than the national economy can provide for the exploitation of economies of scale.

Besides enabling developing countries to achieve economies of scale, integration can also serve as a means to take advantage of location factors and specialization based on comparative advantage. In terms of trade creation and trade diversion discussed in chapter two, trade diversion may prevail because integration may divert trade from a low cost source outside the union to a high cost source within it. However, if the diversion were otherwise to occur anyway through protection of each of the less developed country's domestic market, the coordination of protection is a second best policy. In other words the removal of barriers to trade among the members is a necessary but not sufficient condition to increase trade and enhance their development. Economic integration should be accompanied by the coordination of the member countries planning.

Integration also may serve as a means of increasing the bargaining power of the less developed countries. Their combined supplier position and import potential may give them a stronger position in trade negotiations. So economic integration may tend to reduce the external vulnerability of the developing economies. In other words, with a regional market, the less developed countries may no longer be so dependent on outside countries for their exports and imports. Through economic integration, then, member countries are able to enjoy a more assured market for their products and at the same time have imports from the outside possibly under more favorable terms of trade.

As a result of economic integration more investment is expected to be undertaken in the region. Most probably, there will be an inflow of foreign funds attracted by the larger market. In a study by Krieger[11], she found that there is a (linear) positive relationship between aid and integration such that increasing coordination among recipients increases the positive impact of aid on resource allocation. However, she concludes that in the long-run aid can only be of marginal importance to regional efforts.

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[11] Mytelka Lynn Krieger, "Foreign Aid and Regional Integration: The UDEAC Case", Journal of Common Market Studies, 1973-74, vol. 12 pp. 138-158.

Following the tradition of distinguishing between short-run effects and long-run benefits, the relevance of traditional customs union theory to less developed countries seems to be limited. To see this let us recall the effects discussed in this and the second chapter. The short-run effects generated by integration are better use of the existing capacity, greater efficiency, increased output and employment. In the long-run integration is expected to modify specialization among firms and across countries, change the input mix in favor of local resources, permit economies of scale, enhance competition, facilitate the development of external economies, and improve the bargaining power of the region in the international markets. Integration is also expected to open new possibilities for industrialization. The theory affirms that the gains from integration (almost) are equal to the difference between trade creation and trade diversion and the gains are higher when trade with the rest of the world is small. However, benefits to be derived from increased trade in traditional product of less developed countries (member countries) are minimal. Most of the trades of these countries is with the rest of the world because they are (mainly) exporters of primary products and importers of capital goods. The theory itself which relies on static effects has limited applicability for developing countries[12]. However, the evaluation of economic integration among less developed countries should not be confined to production and consumption effects. Trade diversion in consumer goods would release more foreign exchange which can be directed toward increasing requirements for capital goods. However, in the case of developing countries the emphasis should be put on dynamic rather than static effects of economic integration. The domestic markets of most developing countries are small such that the manufacture of many items for the domestic market alone is not practical even under heavy protection. Integration allows the exploitation of economies of scale. Also developing countries should expect economic integration schemes to be a means of fostering economic growth through the creation of opportunities for more trade among the members not only in products already traded but primarily in products produced through the creation of new industries. In other words, instead of increased trade in traditional products, member countries should benefit from economic integration schemes to be derived from the utilization of the opportunities for industrialization created by such schemes. So an adequate understanding of the key structural conditions in each member countries is necessary to evaluate the overall performance of the countries concerned.

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12. For several arguments which show the limited relevance of the application of production effects, particulary, to problems of less developed countries see Tayeer A. Jaber, "The Relevance of Traditional Integration Theory to less Developed Countries" Journal of Common Market Studies, March 1971, pp. 254-267.

Integration may be aimed at producing an even geographical spread of industries. Then reaching agreements on integration projects is difficult. A complete calculation and estimation of costs and benefits associated with given projects is necessary. If the location of industry or project is dictated by natural resource constraints, it is fine; otherwise it is difficult to get countries to agree on the location of an integration project[13].

In the following chapter, the Andean pact, organization, member countries, their trading partners, its development and progress will be analyzed.

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[13] For a detail analysis see Balassa and Stoutjesdijk, "Economic Integration Among Developing Countries", Journal of Common Market Studies, vol. 14, Sept. 1975, pp. 37-55. Also Elkan, Peter G., "Measuring the Impact of Economic Integration Among Developing Countries", Journal of Common Market Studies, vol. 14, Sept. 1975, pp. 56-68. For a review of experience of various regional cooperation effects in the third world see Vaitsos, Constantine V., "Crisis in Regional Economic Cooperation (Integration) Among Developing Countries: A Survey" World Development, vol. 6, 1978, pp. 719-769.

CHAPTER IV

ANDEAN COMMON MARKET

Countries in Latin America have made considerable efforts in the past to accelerate their economic development through economic integration. Central American Common Market (CACM), Latin American Free Trade Association (LAFTA), and Caribbean Free Trade Association (CARIFTA), are reflections on the desires of the countries of the region for a larger market based on regional integration. The Andean Common Market (ANCOM) is the latest step toward the formation of a common market in the area.

The concept of ANCOM was expressed in the Declaration of Bogota in August 1966 and was endorsed in April, 1967. The agreement was signed on May 26, 1969 by Colombia, Ecuador, Peru, Chile and Bolivia. Venezuela joined the Andean Group in 1973. More than a program to reduce trade barriers, ANCOM was an attempt to strengthen the bargaining power of members in negotiations with the rest of the world, and to accelerate economic development of member countries through regional industrial programs. In addition to the desires of the members to develop new trade the Cartagena Agreement reflects the following obectives:

a) maximum utilization of available resources;

b) stimulation of greater productivity and more efficient utilization of factors of production;

c) greater expansion, specialization and diversification of industrial production; and

d) equitable distribution of benefits.

To achieve these goals, The Cartagena Agreement created the following mechanisms:

I - A Common External Tariff, with the adoption of a Common Minimum External tariff as a preliminary step;

II - programs intended to accelerate the development of the agricultural sector;

III - implementation of Sectoral Programs of Industrial Development;

IV - harmonization of social and economic policies and coordination of national legislations;

V - channeling of resources from within and outside the subregion to provide the financing and investments required in the process of economic integration; and

VI - preferential treatment for Bolivia and Ecuador.

In accordance with the pact The Sectoral Programs of Industrial Development determine: What products are included, joint planning of new investments that will be required, location of the industries, unification of policies that will be necessary and a program of trade liberation for the particular products involved. In order to agree on the country in which the industries should be established, the Commission (political organ) takes into account the comparative advantage of each member for the production of a specific comodity and then this is weighed against the need for maintaining balanced industrial development among members[1]. However, economic action is difficult to achieve within the Andean Common Market as in any other common market due to divergent political and ideological patterns of the member states. Besides, each member country has different needs, history, suffering different political or economic crisis and/or enjoying different economic advantages. Within the Andean Group, Bolivia, Ecuador and Venezuela are oil exporting members while Colombia, Chile and Peru are non-oil countries. Bolivia and Ecuador are the smallest and least developed members. Member needs for foreign investment have been very different. Chile in the period 1972-74 suffered the worst political and economic crisis of its history, while in the same period Venezuela was enjoying the advantage of being an oil exporting country with large surpluses in its balance of payments due to higher oil prices. As a group the Andean countries dominate Latin American mineral production[2].

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[1] For the analysis of Andean Pact and its problems see Krieger, Mytelka Lynn, Regional Development in a Global Economy, The Multinational Corporation, Technology, and Andean Integration (New Haven and London, Yale University Press; 1979) and Vargas-Hidalgo, Rafael, "The Crisis of the Andean Pact: Lessons for Integration Among Developing Countries" Journal of Common Market Studies, March 1979.

[2] 57% of iron, 91% of copper (excluding Venezuela), 88% of tin (excluding Venezuela), 58% of zinc, 44% of lead, and 80% of oil including Venezuela, Morawetz, David, The Andean Group: A Case Study in Economic Integration Among Developing Countries (Cambridge, Mass. M.I.T.; 1974). For detail see Economic Commission for Latin America (Economic Survey of Latin America; 1977 or 1979).

The Andean Common Market covers 5, 475, 000 square kilometers. Its population represents 25% of the population of Latin America[3]. Colombia has 26.36 million, Bolivia 5.43 million. In between are Peru, Venezuela, Chile and Ecuador with population of 17.29, 13.52, 10.92, and 8.08 million, respectively[4]. With respect to per capita income Venezuela is followed by Chile, Peru, Colombia, Ecuador and Bolivia in that order.

In the Andean Common Market two approaches to integration should be distinguished. About one third of all items in the tariff schedule were reserved for "Sectoral Programs of Industrial Development". All other products were subject to automatic tariff reduction programs. It was structured as follows. As of January 1971 a uniform initial tariff level on imports from within the region was established. This uniform tariff was based on the lowest pre-integration rate. Annual reductions of 10% of this initial tariff were supposed to be made until the duties reach zero by 1980.

With respect to import duties for non-member countries, a Common External Tariff (CXT) was supposed to be enforced by 1980. Tariff concessions granted under the LAFTA program are not affected by the Andean external tariff. With respect to sectoral program, since the intent of integration is total elimination of trade barriers among members, the sectoral programs do not grant permanent monopoly right. Specialization based on comparative advantages of the individual countries, as well as equitable distribution of benefits, are the principal determinants of plant assignment. Each member country has committed itself not to encourage new investment in those manufacturing activities which have been assigned to other countries.

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[3] For this and other information (related to industry figures) see Janter Wengel, Allocation of Industry in the Andean Common Market (Martinus Nijhoff Publishing Company Boston/The Hague/London; 1980).

[4] These data were derived from: International Monetary Fund, International Financial Statistics, December 1980. All figures are for 1979 (with the exception of Chile which is for 1978).

Among policy measures are harmonization of monetary and exchange rate policies, coordinated export promotion measures, as well as programs to improve sea and air transport among the member countries. Foreign companies which existed prior to 1971 and which intended to take advantages of tariff reductions had to declare their intention to become mixed enterprises[5]. The reduction of foreign ownership to 49% has to be effected by 1985 in Colombia, Peru, and Venezuela and within twenty-two years (from 1970) in Bolivia and Ecuador. However, firms which have 30% state participation in their capital are not required to reduce foreign equity to 49%. Foreign investment will not be allowed in areas already adequately covered by local investors. No foreign investment in banks will be authorized.

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5. Mixed companies are defined as having between 51% and 80% local capital. Foreign firms are defined as those having less than 51% of their capital in the hands of nationals. All other firms are considered national.

The Andean Development Corporation (Corporation Andina de Fomento) referred to as CAF acts as the development finance institution of the Andean Common Market. Its capital can be formed by shares of stock owned by governments, private institutions and individuals. It is an international corporation since it is assigned to act in several countries and does not depend on any country in particular. The objective of the corporation is to further Andean integration process. CAF can provide capital and offer banking services.

The Governing Structure of the Andean Group[6]

The governing structure of the Andean Group consists of the commission which is the highest organ of the Andean Group and which has one representative from each of the member governments. It formulates the general policies of the group. After the commission there is the technical body known as the Junta (the Board). Its members are chosen by the commission. There are a consultative committee, an Economic and Social Advisory Committee, and specialized advisory councils besides the Commission and Junta.

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[6] The official name of the Group is the Acuerdo de Cartagena so named after the Colombian Coastal City where the agreement was signed on May, 1969. Andean Group members are all members of Latin American Free Trade Area formed in 1960. For the history and agreements, see Krieger, Mytelka Lynn, Regional Development in a Global Economy, The Multinational Corporation Technology, and Andean Integration (New Haven and London, Yale University Press; 1979). For the analysis of objective, methods for achieving objective and coordination of policies see Avery, William P. and Coehran, James D. ,"Subregional Integration in Latin America: The Andean Common Market" Journal of Common Market Studies, Dec. 1972, pp. 85-102.

The Junta is responsible for watching over and administrating the various agreements undertaken by member countries. It is also responsible for research and the drafting of new agreements, which are then considered by the commission. The Economic and Social Advisory Committee is composed of three delegates representing labor and three representing the entrepreneurial class from each member. They do not receive instructions from their governments and are supposed to be elected without government interference. This committee advises the Group on various issues when so requested. There are other advisory committees to aid and advise the Junta in the formulation of policies and programs. Their representatives are either from government agencies or from the private sector.

The Andean Pact lacks supranational authority, and its practice proves that the member nations are not prepared to create such an authority[7].

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[7] For the analysis of this and other problems within the Andean Common Market see Rafael Vargas-Hidalgo, "The Crisis of the Andean Pact: Lessons for Integration Among Developing Countries", Journal of Common Market Studies, March 1979, pp. 213-226.

During the past decade, there has also been poor interaction between the decision-making process at the national and community levels. The administrative structure has not been efficient. Bureucratic problems due to inefficient administrative structure have strongly affected the functioning of the pact. It is not enough to agree upon a decision if there is no legal structure capable of implementing the decision. There is not a minimial level of community law in the Andean Pact. The Andean countries have been utilizing international law methods.

Unequal distribution of costs and benefits has been the root cause of all major conflicts experienced by less developed countries within integration systems. The Andean Common Market is no exception. However, in The Andean Pact all the measures possible have been taken to avoid this problem. To promote balanced and harmonious development of members, the treaty placed emphasis not only on the freeing of trade, but also on the development of new industries in each of the member countries. Members agreed to assign monopoly rights for the production of certain industries to each member based on the existence of economies of scale and favored location[8]. So the Andean Development

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[8] For a cost-benefit analysis of the problem of assigning integration industries to individual members in the Andean Group see Schydlowsky, Daniel M.,"Allocating Integration Industries in the Andean Group", Journal of Common Market Studies, June 1971, pp. 299-307. Also see Janter Wegnel, Allocation of Industry in the Andean Common Market, op.cit.

Corporation's role is to act primarily as a subregional development finance organization channeling subregional and international development lending into projects and industries for the integration scheme. Bolivia and Ecuador (the least developed members) were given special treatment. These two members attracted most attention for new investmnet.

With respect to trade liberalization[9], the integration program called for the elimination of trade barriers among members by the end of 1980. Bolivia and Ecuador were given an additional five years to open their markets to exports from other members. The Cartagena Agreement called for the adoption of an initial point - the lowest duty in 1970 for a given product in the tariff schedules of members (Chile, Colombia, Peru) by December 1970.

Annual reductions of 10% were supposed to follow resulting in complete free trade among Chile, Colombia, Peru and later Venezuela by 1980.

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[9] About one third of all items in the tariff schedule are reserved for sectoral programs and are not subject to the automatic tariff cutting procedure. Within sectoral programs, given manufacturing operations are assigned to each country. Each program contains its own procedures for trade liberalization and its deadline. The sectoral programs do not grant permanent monopoly rights. Tariffs on products included in the Sectoral Development Programs are not affected by other tariffs. These programs include products to be covered, tariffs, and incentives for investment to produce them.

Bolivia and Ecuador were supposed to begin the liberalization procedure in 1976. The Cartagena Agreement provided for both a common minimal external tariff and a uniform common external tariff. The first would be approximated by December 1975 and the second by 1980. The Common External Tariff (CXT) was supposed to be reached in two stages. In the first stage a Common Minimum External Tariff would be reached for all products except for those reserved for "Sectoral Programs of Industrial Development". Tariffs below that should be raised to that level in five annual steps. In the second stage the Common External Tariff should be enforced. The imports from non-Andean LAFTA countries are subject to the Common External Tariff only if they involve products not negotiated within LAFTA. Bolivia and Ecuador were granted duty free access to markets in other member countries while not starting their own tariff reduction procedures until the end of 1975. Members will not have duty free market access to Bolivia and Ecuador until the end of 1985. Bolivia and Ecuador, the two least developed countries of the region, were also permitted to include more items in their lists of exceptional products than the other members.

To assure that the members would not be drawn into competition in attracting foreign capital, measures and mechanisms such as foreign investment rules and harmonization of industrial promotion legislation were included in the treaty. Bolivia and Ecuador received special consideration in the assignment of plants within the framework of sectoral development programs. They also sought numerous exceptions from the foreign investment regulations in view of what they argued to be their continued need for foreign investment because of their less developed status.

Since its creation, The Andean Group has undergone many crises and considerable alteration in objectives, membership and duration of transitional period. In 1975 the Chilean military coup led to Chile's withdrawal from the Andean Group. However, in the 1969-75 period the Andean Group's membership was enlarged through inclusion of Venezuela and cooperation was begun in agriculture, transportation and industrialization. In the wake of Chile's withdrawal, the Cartagena Agreement was modified. The 1976 protocolo de Lima postponed the date at which the Andean Customs Union was to be completed from 1985 to 1988.

The Andean Group failed to meet the 1975 deadline for the adoption of industrial program. Industry in Bolivia and Ecuador did not grow as rapidly as had been planned and anticipated. However, in total the Andean Group has gone further than any other third world integration system so far. Industrial programming is given a central role and the less developed members of the region, Bolivia and Ecuador are granted exceptionally favorable status.

A single raw material or agricultural product accounts for 50% of total exports of each member except Peru. It is tin in Bolivia, copper in Chile, coffee in Colombia, bananas and then petroleum in Ecuador and petroleum in Venezuela[10]. As Table 4-1 indicates, the rate of inflation and exchange rate stability have been different in member countries. Economic policy decisions are centered on the objectives of

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[10] Krieger, Mytelka Lynn, Regional Development in a Global Economy, The Multinational Corporation, Technology, and Andean Integration, op.cit. p. 54.

TABLE 4-1

Total Reserves (with Gold at SDR 35 per ounce)
(Millions of SDRs)

Country	Year 1972	1973	1974	1975	1976	1977	1978
Bolivia	55	60	158	134	145	195	153
Chile	137	149	84	93	396	399	885
Colombia	300	443	367	445	997	1499	1886
Ecuador	132	200	286	244	443	552	528
Peru	446	471	791	399	284	329	334
Venezuela	1594	2000	5319	7568	7384	6762	5031

Consumer Prices

1975 = 100

Country	Year 1973	1974	1975	1976	1977	1978	1979
Bolivia	56.9	92.6	100.0	104.5	113.0	124.7	149.3
Chile	3.5	21.1	100.0	311.8	598.5	838.4	1118.4
Colombia	65.7	81.5	100.0	120.2	159.9	188.3	234.3
Ecuador	70.3	86.7	100.0	110.7	125.1	139.7	154
Peru	69.2	80.9	100.0	133.5	184.3	290.9	484.9
Venezuela	83.8	90.8	100.0	107.7	116	124.3	139.6

Exchange Rate
(Domestic Currency per U.S. Dollar)

Country	Year 1973	1974	1975	1976	1977	1978	1979
Bolivia	20	20	20	20	20	20	24.51
Chile	.36	1.87	8.5	17.42	27.96	33.95	39
Colombia	24.89	28.69	33.092	36.465	38.112	41	43.98
Ecuador	25	25	25	25	25	25	25
Peru	38.7	38.7	45	69.37	130.38	196.18	250.12
Venezuela	4.2850	4.2850	4.285	4.2925	4.2925	4.2925	4.2925

Source: International Monetary Fund, International Financial Statistics, June 1980, individual country pages.

price and exchange rate stability in Bolivia with balance of payments deficits covered by external borrowing. In Colombia the chief aim is to control the expansion of international reserves resulting from coffee booms in recent years. (Table 4-1). The highest rate of inflation belongs to Chile (Table 4-1). In Ecuador and Venezuela basic government policy is to conserve basic natural resources (reduction in the volume of petroleum produced, refined, and exported). From 1977 Venezuela has persuaded its policy of financial cooperation with other developing countries.

The period between May 1969 to July 1976 is the Andean consolidation phase, some five years which lasted until the Chilean military regime took over. It was during this period that liberalization of trade took place and cooperation was begun in many sphares. Industries were developed in the same period.

Intraregional trade matrices (Table 4-2) indicates that regional trade among members of Andean Common Market has increased significantly during the short period of five years. Bolivian imports have increased from 3.5 to 17.1 millions of U.S. dollar whereas her exports to other members of the Andean Group have increased from 4.6 to 46.02 millions. Chilean imports have gone up from 58.1 to 219.3 million U.S. dollars. For Colombia it is some 74.6 million dollar while for Ecuador, Peru and Venezuela the increase in imports are 144.6 millions, 184.1 and 72 respectively. As Table 4-2 indicates, intraregional exports of Bolivia and Venezuela have increased more than other members of the Andean Group during the same period. Part of this increase may be attributed to the higher

TABLE 4-2

Intraregional Trade Matrices 1969
(Exports FOB millions of U.S.$)

Importer	Exporter Bolivia	 Chile	 Colombia	 Ecuador	 Peru	 Venezuela	 Total
Bolivia	-	.8	.5	.1	2.1	a	3.5
Chile	1.3	-	6.6	3.9	9.5	38.89	58.1
Colombia	a	3.1	-	5.4	7.5	7.13	23.1
Ecuador	a	2.4	14.24	-	2.5	11.75	30.9
Peru	3.3	4.6	16.17	1.9	-	9.21	35.2
Venezuela	a	4.6[b]	6.37[b]	.04	5.7	-	16.7
Total Exports	4.6	15.5	43.88	11.34	27.3	64.93	

Intraregional Trade Matrices 1974
(Exports FOB millions of U.S.$)

Importer	Exporter Bolivia	 Chile	 Colombia	 Ecuador	 Peru	 Venezuela	 Total
Bolivia	-	2.4	7.1	.2	7.4	a	17.1
Chile	26.8	-	36.5	82.2	20.3	53.5	219.3
Colombia	2.8	37.7	-	25.8	21.2	10.2	97.7
Ecuador	6.8	3.6	45.6	-	11.8	107.7	175.5
Peru	9.8	15.6	41.7	63.0	-	89.3	219.3
Venezuela	.02	8.5	71.4	.9	7.9	-	88.7
Total Exports	46.02	67.8	202.3	172.1	68.6	262.7	

a: None or missing data
b: Derived from Venezuela import data

Sources: IMF, Direction of Trade, Annual 1969-75, and Vol. 7-8 (1966-70) and (1968-72); Integration Latino Americano (Buenos Aires: Intal, August 1976), pp. 68 and 69, reprinted in Krieger, Mytelka Lynn, Regional Development in Global Economy, The Multinational Corporation, Technology and Andean Integration (New Haven & London, Yale University Press; 1979) p. 199 (Appendix).

price of petroleum exported from Venezuela[11].

Major trading partners of the Andean Group are presented in Table 4-3. The figures are in percentages of total trade. As this table indicates, extra-regional imports of Bolivia, Chile, Ecuador and Venezuela have declined during 1969-74. With the exception of Bolivia and Colombia extra-regional exports of (other) members have declined as well. Outside the Andean Common Market, the European Economic Community is the major destination of exports for Bolivia and Chile. For Colombia, Ecuador, Peru and Venezuela the major destination of exports is the United States. The United States is also the main source of imports for all members of the Andean Common Market, though its role is declining.

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[11] The data in Table 4-2 are presented in million U.S. dollar including both volume and value of exports.

TABLE 4-3

Andean Group: Major Trading Partners %

		Imports (CIF)						Exports (FOB)					
		1969	1970	1971	1972	1973	1974	1969	1970	1971	1972	1973	1974
Bolivia	U.S.A.	31	34	29	25	26	26	31	35	32	28	27	30
	EEC	26	25	25	21	19	19	53	45	34	35	29	21
	Japan	18	14	12	12	11	9	6	10	8	6	6	5
	LAFTA	16	17	23	28	31	23	9	8	19	26	31	32
	Percent Total	91	90	89	86	87	77	99	98	93	95	93	88
Chile	U.S.A	39	31	27	16	16	22	17	14	8	10	9	12
	EEC	25	31	26	28	27	20	60	55	49	45	49	38
	Japan	2	3	5	4	3	3	13	12	19	17	17	17
	LAFTA	24	22	24	28	27	33	10	11	14	12	11	16
	Percent Total	90	87	82	76	73	78	100	92	90	84	77	83
Colombia	U.S.A.	46	48	43	39	40	40	39	38	38	34	38	38
	EEC	18	20	25	26	23	23	27	25	26	25	24	24
	Japan	5	6	7	8	9	10	2	3	3	4	5	2
	LAFTA	11	9	10	10	11	12	9	11	13	12	9	14
	Percent Total	80	83	85	83	83	85	77	77	77	75	76	78
Ecuador	U.S.A.	41	46	40	41	36	39	39	43	42	38	42	43
	EEC	28	24	23	25	26	23	25	20	20	19	12	11
	Japan	9	10	16	14	15	15	13	18	14	16	4	1
	LAFTA	12	13	15	12	15	12	11	10	13	11	17	18
	Percent Total	90	93	94	92	92	89	88	91	89	84	75	73
Peru	U.S.A.	31	32	29	30	30	31	35	33	29	33	35	36
	EEC	26	26	27	26	26	24	33	36	34	29	22	22
	Japan	7	8	10	8	11	12	16	14	12	14	17	14
	LAFTA	18	18	14	16	17	17	6	6	9	8	8	19
	Percent Total	82	84	80	80	84	84	90	89	84	84	82	82
Venezuela	U.S.A.	50	49	44	45	42	47	32	36	40	33	38	38
	EEC	27	26	29	29	29	24	12	11	12	9	7	7
	Japan	7	8	9	9	8	10	-	-	-	-	-	-
	LAFTA	4	4	3	4	7	6	6	4	4	6	5	4
	Percent Total	88	87	85	87	86	87	50	51	56	48	50	49

Source: JUNAC, Anexos, Jun/di 196, pp.13-18, repreinted in Lynn Krieger Mytelka, Regional Development in Global Economy, The Multinational Corporation, Technology and Andean Integration 1979. Appendix

CHAPTER V

A MODEL OF THE ANDEAN COMMON MARKET

Economic cooperation is generally recognized as an essential element of economic policy for developing countries to enhance development of their economies. The basic purposes of this chapter are to assess the impact of the Andean Common Market on the economies of the member countries and to contribute to the formulation of policies which aim at furthering the goals of economic development, at the regional and national level.

In order to assess the impact of the Andean Common Market on the economies of member countries a small short-run macroeconomic model is set for each member and then for the Andean Group as a whole. In referring to a model[1] for the members of the Andean Group, it is not implied that all of them are alike. There are institutional elements and structural characteristics that are different among them. However, there are some characteristics that are either similar in all of them or that can be reflected in similar variables.

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[1] For analysis on model building see "Models For Developing Countries UNCTAD Staff" in The International Linkage of National Economies Models edited by R.J. Ball (North-Holland/American Elsevier: 1974) pp. 109-176; L.B.M. Mennes, Planning Economic Integration Among Developing Countries (Rotterdam University Press; 1973), Blitzer, Charles R.; Clark, Peter B.; and Taylor, Lance, eds. Economy-Wide Models and Development Planning (London: Oxford University Press for The World Bank; 1975).

Intraregional trade and factor movements consitute the links by which the actions of one member affect those of another in the region. Factors, especially labor, are still largely immobile between member countries of the Andean Common Market, and due to insufficient data on intraregional capital flows and trade in invisibles some simplifications have had to be adopted which involve concentrating on trade of visible commodities.

The underlying theoretical basis of the model is discussed in the first section of this chapter. The second and third sections discuss problems with existing data and estimation procedures. Some of the required data were not available. Hence construction of a large number of data series were required which was a time consuming aspect of the study. Empirical results and analysis are provided in the last section.

THE MODEL

The model for each country consists of 13 equations in 13 endogenous variables and 9 exogenous variables. For the Andean Group as a whole, the entire model consists of 78 equations. However, 5 of the 13 equations for each country are identities which do not have to be estimated empirically. Since the model is identical for each country, country subscripts will be omitted from the presentation.

1. Gross Domestic Product (GDP):

$$GDP_t = C_t + I_{Pt} + Ig_t + G_t + \sum_{i=6}^{n} EX_{it} + \sum_{i=1}^{5} EI_{it} - \sum_{i=6}^{n} NX_{it} - \sum_{i=1}^{5} NI_{it}$$

where C : Private Consumption,

Ip : Gross Private Investment,

Ig : Government Investment,

G : Government Consumption,

$\sum_{i=6}^{n} EX_i$: Extra-regional exports,

$\sum_{i=1}^{5} EI_i$: Intra-regional Exports,

$\sum_{i=6}^{n} NX_i$: Extra-regional Imports,

$\sum_{i=1}^{5} NI_i$: Intra-regional Imports .

2. Gross National Product (GNP):

$$GNP_t = GDP_t - NFP_t$$

where NFP: Net Factor Payments to Foreigners.

(NFP = FP by residents to foreigners - FP by foreigners to residents).

3. Disposable Income (Yd):

$$Y_{dt} = GNP_t - T_t$$

where T: Tax Revenue.

4. Private Consumption (C):

$$C_t = c(Y_{dt}, W_t, i - \frac{\Delta P}{P}, \text{time})$$

where W: Real wealth

i: Nominal Interest Rate

P: Price Level.

The focus is on the determination of total consumption rather than allocation of the total by categories of consumption. The attempt is to apply the concept of permanent income, including nonhuman wealth as a separate variable in the consumption function. Accepting the main findings in the literature[2] on the significance of the interest rate on consumer spending we expect consumption to be influenced negatively by interest rates.

5. Private Investment (I_p)

$$I_{pt} = I_p(GNP_t, GNP_t - GNP_{t-1}, i - \frac{\Delta P}{P}, Cu)$$

where Cu: Membership in the Andean Common Market

Private investment is made[3] to depend mainly on output, change in output and the real rate of interest. To check the influence of customs union participation on investment, the dummy variable Cu is also included in the private investment function. The enlarged markets due to formation of the customs union are expected to offer economies of scale and widen the range of industries economically feasible in the region, not only to supply the regional market but also to promote (non-traditional) exports outside the region.

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[2] Feber, Robert, "Consumer Economics, A Survey" Journal of Economic Literature, December 1973.

[3] The expression is a transformation of Resek's model, see Jorgenson, Dale W., "Econometric Studies of Investment: A Survey", Journal of Economic Literature, December 1971.

6. Extra-regional Exports $\left(\sum_{i=6}^{n} EX_i\right)$:

$$\sum_{i=6}^{n} EX_{it} = EX(FD_t, Cu, CR_t, Time)$$

where FD: Foreign Demand

CR: Amount of Credit Available to the Private Sector

Extra-regional exports are expected to be influenced positively by the level of foreign demand, institutional changes (time), and availability of credit to the producers and sellers of exports. Time and CR are expected to improve the competitiveness of member countries in world markets Membership in the customs union may or may not have a positive effect on extra-regional exports[4].

7. Intra-regional Exports $\left(\sum_{i=1}^{5} EI_i\right)$:

$$\sum_{i=1}^{5} EI_{it} = EI(CR_t, \sum_{j=1}^{5} M_{jt}, Time)$$

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[4] The effect of the customs union on extra-regional exports depends on many factors. It is highly possible that the enlargement of the market results in unit cost reduction, lower prices, and increase in extra-regional exports. It makes a great difference whether the members are producers for the world markets or for the market of partner countries. It is also possible that a customs union results in greater potential scope for division of labor and eventually more extra-regional exports.

where $\sum_{j=1}^{5} M_{jt}$: Total Imports of Members (excluding the country under consideration.)

Intra-regional exports are assumed to be affected by the availablity of credit, factors affecting competitiveness that vary with time, and total imports of other members of the Andean Common Market.

8. Extra-regional Imports $\left(\sum_{i=6}^{n} NX_i\right)$:

$$\sum_{i=6}^{n} NX_{it} = NX(GNP_t, Cu, CR_t, Time) \quad .$$

9. Intra-regional Imports $\left(\sum_{i=1}^{5} NI_i\right)$:

$$\sum_{i=6}^{5} NI_{it} = NI(GNP_t, CR_t, Cu, Time)$$

Imports (extra-regional as well as intra-regional) are expected to be influenced positively by GNP and CR .

10. Credit (CR):

$$CR_t = CR(MS_t, Time)$$

The stock of loan to the private sector is expected to be positively related to money supply (MS). It also depends on change in financial institutions and regulations (indicated by time).

11. Money Supply (MS):

$$MS_t = MS(GNP_t, i - \frac{\Delta P}{P}, RM_t, Time)$$

where RM: Reserve Money

Money supply is determined by the stock of reserve money which is a policy instrument. GNP, rate of interest and other factors such as institutional changes are expected to influence the supply of money. Monetary authorities are expected to reduce fluctuations in the interest rate by expanding or contracting the money supply as interest rates tend to rise or fall[5].

12. Balance of Payments (BP):

$$BP_t = \sum_{i=6}^{n} EX_t + \sum_{i=1}^{5} EI_t - \sum_{i=6}^{n} NX_t - \sum_{i=1}^{5} NI_t - NFP_t \,.^{6}$$

13. Fiscal Balance (FB):

$$FB_t = T_t - G_t - I_{gt} \,.$$

Data Sources

The basic source of data on extra and intra-regional trade used in this study is the series of United National Yearbook of International Trade Statistics. These yearbooks contain data for each country on imports from and exports to all principal sources and destinations. Some of the data are in millions of U.S. dollars at current prices and others in thousands of U.S. dollars. Data for some other countries are in domestic currencies. It has been attempted to use data in the same unit of currency.

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[5] Winston, W. Change and Daivd J. Smyth, "Stability and Instability of IS-LM Equilibria", Oxford Economic Papers, 1972, pp. 372-384.

[6] NFP is not considered a part of imports since NX and NI deal with goods and NFP denotes net factor payments to foreigners.

The required data on intra and extra-regional trade were not available in published form. Hence construction of a large number of data series was required. For each member of Andean Common Market, trade with partners has been added to get intra-regional trade. Then, intra-regional trades have been subtracted from total trade in order to have extra-regional exports and imports for each member country.

The basic source of data on Gross National Product, Consumption Investment as well as other variables in the International Monetary Fund's, International Financial Statistics series. The raw data are at market prices and in units of domestic currencies. In this source, a standardized system of national income account is used for each country, so the data for different countries are as comparable to one another as possible. There are limitations of price series. The price series used here are those available which may cause some deficiencies with the data. There was no need to construct a price index for each member since a separate index for each country was available though not complete. Some further calculation was necessary. Because of the lack of data, the price indexes used for intra-regional trade were the same as those for extra-regional trade.

The data were deflated by the appropriate price indexes. Government Investmant (Ig) was calculated for each member as the difference between total government expenditure and government consumption. Then, gross private investment (Ip) was calculated as the difference between gross fixed capital formation and government investment. The investment variable was deflated by manufacturing prices where available, otherwise the consumer price index was used. The same procedure was followed for other variables.

The period covered by this study is 1960 to 1976. All variables except Cu (membership in Customs union), FD (foreign demand-index of U.S. imports), and time are in real terms at 1963 prices. To make recent data comparable with the data published for earlier years, recent data have been adjusted where necessary. The quality of the data varies from one country to another. However, since the same publications were used for all members, there is a possibility of less deficiencies with the data. Because all countries did not join the Andean Common Market simultaneously, the dummy varialbe Cu has varied from country to country (see following pages for the figures used in each case).

Construction of a large number of data series was in fact one of the most important and time consuming aspects of the study. The constructed data series are presented in the following pages.

Basic Data

Bolivia

Bolivia

	GNP	Consumption	Ip	Ig	$\sum$Ex	$\sum$Ei	$\sum$Nx	$\sum$Ni	Total Imports	MS
1960	4472	3763	569.9	67.1	721.52	4.48	1004.50	67.50	1072	418.4
1961	4867	4214	461.7	70.3	792.27	6.73	1082.37	54.63	1137	495.1
1962	5327	4411	803	32	871.28	4.72	1255.13	72.81	1328	555.9
1963	5721	4799	857.6	66.4	992.17	2.83	1480.71	39.29	1520	664.9
1964	6431	5022	814.4	143.6	1332.28	4.72	1479.12	39.88	1519	802.7
1965	7145	5505	885.6	165.4	1525.48	14.51	1864.69	45.31	1910	943.1
1966	7952	6080	873.7	75.3	1706.3	36.7	2042.45	45.55	2088	1153.3
1967	8787	7035	921.9	233.1	1981.25	33.75	2282.49	49.56	2332	1191.9
1968	9939	7712	1221	350.2	1966.58	43.42	2392.08	51.92	2444	1287
1969	10822	8646	1634	408	2080.06	57.94	2556.89	55.106	2612	1361.2
1970	11796	8615	1872.1	479	2393.7	100.3	2460.53	53.45	2512	1532.3
1971	12967	9945	1711.9	277.1	2210.92	125.08	2656.01	56.99	2713	1765.6
1972	14967	11473	2059.4	190.6	2545.06	417.94	3241.43	188.57	3430	2210
1973	25978	18586	2089.4	564.6	5422.51	455.49	5887.46	226.54	6114	2969
1974	43583	30037	3693.2	804.8	11950.65	497.35	9237.8	382.2	9620	4257
1975	49518	35444	8113.6	716.4	9989.62	484.38	12549.36	692.64	13242	4759
1976	57835	41651	8924.2	1672.8	12233.04	470.96	13386.48	721.52	14108	6497

All figures in Millions of pesos

Bolivia

	RM	CR	Index	FD (Million $)	Cu	TIME	TAX	TOTAL EXPORT	r	P	PX
1960	398.8	81.7	86.9	15070	0	0	303.9	726	11.8	88.4	89
1961	470.3	116	86	14760	0	1000	383	799	11.8	95.1	97
1962	504.6	141.9	96.5	16460	0	2000	394	876	11.8	100.7	99
1963	594.2	194.2	100	17200	0	3000	446.1	995	11.8	100	100
1964	726.6	249.5	107.2	18750	0	4000	527.5	1337	11.8	110.1	133
1965	849.9	304.9	121.9	21430	0	5000	632.2	1540	11.8	113.3	154
1966	1032.1	390.4	141.9	25620	0	6000	741.5	1743	11.8	121.2	144
1967	1079.5	434.2	146.8	26890	0	7000	770.4	2015	11.8	134.7	139
1968	1145.1	570.1	179.6	33230	0	8000	836.7	2010	11.8	142.1	137
1969	1267.2	639	189	36040	0	9000	871.4	2138	11.8	145.3	149
1970	1413.7	776	195.3	39950	1000	10000	1131.4	2494	11.8	151	182
1971	1678.6	977.5	211.9	45600	1000	11000	1150.9	2336	11.8	156.5	151
1972	1974	1361	246	58860	1000	12000	1389.4	2963	21.7	166.7	154.7
1973	2768	1830	260	73580	1000	13000	2478.5	5878	24.1	219.3	198.4
1974	3668	3005	252	108000	1000	14000	5069.8	12448	24.5	356.8	373.1
1975	4348	3713	224	103390	1000	15000	5688.8	10474	23.4	385.2	347.6
1976	6315	5136	272	129570	1000	16000	5885.7	12704	23.2	402.6	358.5

Chile

	GNP	Consumption	I_p	I_g	$\sum EX$	$\sum Ei$	X	$\sum NX$	$\sum Ni$
1960	4081	3114	249	392	541.5	32.5	574	565.3	131.7
1961	4626	3544	372	421	536.1	31.9	568	606.9	166.1
1962	5573	4255	260	573	629.5	35.5	665	564.9	181.1
1963	8242	6236	658	783	1056.2	34.8	1091	1098.1	207.9
1964	12492	9374	1045	1066	1600.5	43.5	1644	1558.6	204.4
1965	17547	12563	1082	1777	2461.3	53.7	2515	2158.5	210.5
1966	24311	17325	1353	2440	3818.8	75.2	3894	3327.6	266.4
1967	31813	23518	2053	2708	4855	76	4931	4167.3	296.7
1968	42882	31510	2831	3880	6576.5	72.9	6649	6021.7	239.3
1969	62457	44551	4443	5212	11296.87	133.13	11430	9156	662
1970	90,320	64908	7100	6200	14551	220	14771	13533	906
1971	127,400	92700	3100	13700	13630	270	13900	14037.8	1162.20
1972	237,600	179100	3700	24500	22095	405	22500	27226	1974
1973	1,202,200	915000	15600	146400	14580	920	15500	150788	25212
1974	9,360,730	7049000	287100	1048100	1497380	135620	1633000	1344360	251630
1975	37,578,300	35360000	1933900	2637100	7409360	903640	8313000	8876000	883000
1976	142,361,000	141,440,000	7735600	10548400	27637080	2,910,920	30,548,000	23362000	1236000

All figures in Millions of Escudos

Chile

	Total M	i	MS	RM	CR	Cu	T	PI	P	PX	PM
1960	697	16.55	384	264	525	0	708	36.5	57	104.2	56.5
1961	773	15.88	432	292	664	0	785	42.3	61	98.3	57.1
1962	746	14.62	557	499	855	0	957	47.3	69	99.9	59.5
1963	1306	14.21	474	587	1079	0	1354	100	100	100	100
1964	1763	14.63	1129	976	1525	0	1959	140	146	106.2	148.8
1965	2369	15.30	1867	1272	2078	0	3209	154.2	188	115.1	159.2
1966	3594	15.84	2594	2060	2684	0	4898	126.1	231	139.6	179.9
1967	4464	15.84	3240	2466	3483	0	6312	118.5	273	136	213.6
1968	6261	16.61	4482	3369	4747	0	8757	156.5	345	144	295.9
1969	9818	19.59	6069	4900	6101	0	13069	267.9	451	164	406.5
1970	14439	20	10051	7741	8192	1000	19615	292.5	598	100	546.2
1971	15200	15	21500	21400	11888	1000	23457	239.7	718	86	667.2
1972	29200	20	54200	60000	22800	1000	37800	267	1261	78	1900
1973	176000	15	224600	310900	88800	1000	195600	292	5734	120	1298
1974	1596000	20	836700	1003500	582500	1000	1743700	350	5797	146	18785
1975	9759000	50	3278700	3770700	3072800	1000	7703500	380	27518	87	102580
1976	24,598000	50	8795000	13822000	13111000	0	49307400	1500	60000	104	307740

Note: Membership in customs union, the dummy variable Cu, for Chile is different due to withdrawl of Chile in 1975.

Bolivia

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   GNP        CON        RM         MS         CR         IP
 ..........................................................................
 5055.82    4255.78    451.131    473.303    92.4206    644.663
 5123.15    4435.78    485.052    521.157    122.105    466.000
 5288.87    4380.34    501.052    552.035    140.914    787.418
 5721.00    4788.00    554.200    564.500    194.200    657.600
 5846.38    4565.45    550.545    729.727    228.618    740.383
 6323.01    4871.68    752.124    834.602    259.623    783.717
 6561.05    5018.50    851.557    851.587    322.112    720.674
 6523.38    5222.71    801.410    884.855    322.348    684.410
 6998.28    5430.96    805.408    906.238    401.479    669.655
 7448.04    5850.45    872.126    936.620    439.780    1124.57
 7953.84    5705.30    935.225    1014.77    513.907    1239.60
 8825.55    6354.83    1072.59    1128.18    524.601    1083.67
 10285.1    6882.42    1184.16    1325.73    516.437    1235.39
 11845.8    8475.14    1282.20    1353.85    634.473    952.759
 12215.0    8418.44    1028.03    1193.11    642.209    1035.09
 12855.1    8201.45    1128.78    1238.48    963.915    2109.33
 14433.4    10345.5    1555.55    1613.76    1275.71    2215.64

    1          2          3          4          5          6

   YD         EX         EI         MX         MI
 ...............................................................
 4715.04    610.595    5.03371    1138.31    78.3578
 4720.00    615.773    5.93614    1085.71    57.5052
 4888.71    660.080    4.75765    1248.41    72.3039
 5274.90    892.170    2.63000    1480.71    39.2900
 5385.82    1001.71    3.54667    1344.85    36.2545
 5753.84    890.571    9.42208    1650.17    40.0973
 5849.42    1164.93    25.4661    1685.19    37.5625
 5951.45    1425.35    24.2806    1694.46    36.7929
 6410.07    1435.46    31.6634    1664.55    35.5634
 6644.31    1395.01    38.6659    1759.73    37.9257
 7204.37    1215.22    65.1085    1629.50    35.3973
 7690.16    1464.19    62.8344    1887.13    36.4153
 9431.87    1645.15    270.181    1844.47    113.119
 10715.7    2733.12    229.582    2684.66    103.301
 10784.1    3203.07    123.302    2689.07    107 119
 11378.2    2873.88    139.350    3257.86    178.613
 12971.5    3412.28    131.389    3325.01    179.219
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Chile

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   GNP        CON        RM         MS         CR         IP
 ..........................................................................
 7159.84    5452.15    482.158    673.864    921.082    882.192
 7563.81    5609.83    478.666    708.197    1066.52    679.433
 8078.81    6156.68    723.156    807.248    1238.13    549.863
 8242.00    6238.00    587.000    474.000    1079.00    658.000
 8556.15    6420.55    556.483    773.287    1044.52    746.428
 9233.51    6862.45    678.595    953.086    1105.32    701.666
 10524.2    7500.00    691.775    1122.94    1161.90    1072.86
 11653.1    8614.65    903.287    1165.81    1275.82    1732.49
 12429.8    9133.33    978.521    1289.13    1275.94    1806.94
 13646.8    9876.27    1086.47    1345.68    1352.77    1656.45
 15102.7    10652.6    1294.48    1660.77    1369.90    2427.35
 17743.7    12910.9    2860.50    2994.43    1855.71    1283.28
 22014.3    14203.0    4798.13    4298.17    1806.09    1365.77
 20866.2    15957.4    5422.04    3916.99    1546.65    5342.45
 161475.    121597.    17310.7    14433.3    10046.6    82028.5
 136555.    128498.    13702.7    11914.7    11168.5    606621.
 237268.    238733.    23038.7    14856.3    21651.7    515707.

    1          2          3          4          5          6

   YD         EX                EI                MX         MI
 ...............................................................
 5917.54    519.674           31.1900           1000.53    233.097
 6298.72    548.371           32.4517           1062.87    290.693
 6565.65    620.139           35.5356           949.411    305.714
 6866.00    1056.20           34.6000           1096.10    207.900
 7214.38    1507.08           40.9504           1047.45    137.366
 7628.59    2138.40           46.6561           1255.90    132.224
 8403.85    2738.53           53.6662           1649.59    146.082
 9341.02    3565.45           55.6623           1950.98    136.904
 9851.30    4557.01           50.6250           2035.04    60.6719
 10950.6    6666.33           61.1756           2252.40    162.654
 11623.5    14551.0           220.000           2477.66    165.673
 14478.7    15648.6           313.953           2103.89    174.181
 19018.7    26328.9           519.231           1432.95    163.695
 17584.9    12150.0           766.557           11916.5    1942.37
 131398.    0.102560E+07      92890.4           7156.56    1339.58
 108565.    0.861850E+07      0.102867E+07      6652.78    660.781
 156085.    0.285741E+08      0.279999E+07      7581.47    401.638
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Colombia

	GNP	Consumption	I_p	Total Exports	$\sum$Ex	$\sum$Ei	Total Imports	$\sum$NX	$\sum$Ni	i	MS	RM
1960	26450	19590	4420	4160	4126.57	33.43	4160	4159.66	.34	5	3990	2080
1961	30030	22580	4980	3920	3876.99	43.01	4440	4439.45	.54	5	4960	2350
1962	33700	25700	5320	4150	4092.49	57.51	4410	4356	54	5	6010	3220
1963	42710	33030	6520	5170	5121.76	48.24	5670	5609.7	60.3	8	6700	3320
1964	52960	41470	7690	6380	3607.64	72.36	7170	7064.7	105.3	8	8070	4260
1965	59900	45480	9110	6940	6779.23	160.77	6320	6159.23	160.77	8	9340	4900
1966	72370	55840	11240	8920	8687.4	232.6	11100	10881.3	218.7	8	10650	5600
1967	81610	61600	13530	9950	9673.94	276.06	9520	9251.87	268.13	8	13110	6730
1968	94420	70700	16630	12520	12113.37	406.63	13780	13412.19	367.82	8	15000	9040
1969	108280	81680	18650	14680	13885.16	794.84	15950	15417.48	532.52	8	18300	11730
1970	127000	94620	22720	18520	17321.88	1198.13	20640	19963.3	676.7	14	22397	13810
1971	148570	110030	29380	19150	17541.4	1608.6	24930	23850.6	1079.4	14	25063	15363
1972	181640	134850	29141	25220	23243.17	1976.83	26360	25767.41	592.6	14	31854	18919
1973	237970	180200	39090	36190	34002.17	2187.83	32930	31809.5	1120.5	14	41647	24808
1974	323950	237440	24770	46790	42498.55	4291.45	52510	49586.5	2923.5	16	49067	30101
1975	404790	306610	68410	62240	55956.87	6288.13	60050	57129.5	2920.5	16	58067	37745
1976	523010	373650	91480	88050	80935.8	7114.2	77770	73174.6	4595.4	20	58915	53426

All figures (with the exception of i) are in millions of Pesos

Ecuador

	GNP	Consumption	I_p	Total Export	$\sum EX$	$\sum Ei$	Total Import	$\sum NX$	$\sum Ni$	i	MS
1960	13740	10120	1900	2530	2407.29	122.72	2480	2437.58	42.42	5	1730
1961	14620	10750	2050	2520	2387.29	132.71	2580	2538.2	41.8	5	1780
1962	15670	11560	1960	3080	2972.74	107.26	2930	2877.28	52.72	5	2000
1963	17100	12670	2150	3020	2885.47	134.53	2940	2867.28	72.72	5	2240
1964	18930	14210	2340	3250	3093.65	156.35	3330	3179.11	150.89	5	2500
1965	20220	15120	2410	3620	3453.65	166.35	3570	3436.38	133.62	5	2580
1966	22220	16570	2520	3730	3568.2	161.8	3600	3392.75	207.25	5	2910
1967	24470	18480	2970	4040	3838.93	201.07	4210	3893.67	316.33	5	2230
1968	26720	20000	3770	4260	4036.39	223.6	5130	4755.49	374.51	5	2830
1969	30110	22610	4740	4180	3976.38	203.62	5840	5253.69	586.31	5	4340
1970	34310	25210	5450	5440	5036	404	7040	6335.52	704.48	8	5400
1971	39270	28730	9310	6710	6033.3	676.7	10090	8819.17	1270.83	8	6700
1972	45070	32310	8990	9310	8610.57	699.43	9650	8612.23	1037.77	8	8380
1973	59760	38610	11150	15630	13693.32	1936.68	12320	11393.33	926.67	8	11300
1974	88210	53860	16700	32740	28422.25	4317.75	27200	25657.23	1542.77	8	17036
1975	105880	65930	234200	28160	24885.1	3274.9	32120	30188.4	1931.6	8	18881
1976	126480	77140	24800	36580	29605.95	6974.05	34210	31811.25	2398.75	8	24757

All figures are in millions of Sucres

Ecuador

	RM	Tax Revenue	P	Px	CR
1960	1270	1360	88.2	131	2610
1961	1290	1570	91.8	122	2770
1962	1470	1620	94.5	121	2820
1963	1630	1640	100	100	2940
1964	1790	2090	103.4	121.	3400
1965	1880	2000	106.7	126	3430
1966	2120	2210	111.1	130	3520
1967	2190	2650	115.4	139	4060
1968	2520	2770	120.4	131	4870
1969	2990	3200	128	136	5410
1970	4000	3720	134.6	138	6450
1971	4340	4420	145.8	138	7090
1972	6480	5407	156.8	122.8	6260
1973	9115	7981	177.1	149	7616
1974	13104	11394	218.4	288.4	9827
1975	13412	12273	251.9	267.7	12196
1976	17874	14653	278.8	321.5	16024

Colombia

GNP	CON	RM	MS	CR	IP
38897.0	28806.5	3058.82	5567.64	6452.93	6499.59
40681.1	30513.5	3175.67	5702.70	7425.67	5728.72
44459.1	33905.0	4248.02	7828.75	6344.32	7018.48
42710.0	32030.0	3320.00	6899.99	7498.59	5518.99
45034.0	35283.5	3622.45	6862.24	7825.64	6539.11
49179.0	37339.9	4022.96	7666.30	8801.21	7479.47
49566.5	38246.6	3835.61	7294.52	9058.21	7896.63
51684.5	39012.0	4282.19	6302.72	9877.64	6688.71
56235.8	42106.3	5384.15	6833.89	10943.4	9804.70
58647.5	44391.3	6375.00	9845.94	12145.1	10135.9
64596.2	46128.1	7024.41	11382.2	8943.02	11956.4
69295.7	51318.9	7165.57	11869.5	10035.0	13703.4
74381.5	55221.1	7747.33	13044.2	10275.4	11833.2
79349.8	60056.7	8272.09	13867.0	9995.33	13034.2
89869.5	63759.4	8082.97	13175.9	12121.6	9951.45
89348.0	65403.1	8061.41	12567.2	11850.7	14582.5
84989.1	67682.3	9703.23	14417.5	13284.0	16614.6
1	2	3	4	5	6

YD	EX	EI	NX	NI
35882.3	3884.43	29.8482	7573.02	0.500000
37848.5	3589.60	39.6241	5999.27	0.729730
41418.9	3973.28	55.6349	5746.70	71.2401
39541.0	5121.75	48.2400	5508.70	80.3000
41762.7	5345.45	81.3220	6007.39	89.5408
45837.5	5694.96	139.600	5056.64	131.985
45440.4	7756.61	207.678	7452.94	149.794
47449.0	9576.15	273.326	5859.32	189.610
51255.5	11675.6	388.656	7888.20	219.071
53640.2	13099.2	749.649	8379.06	289.413
58519.6	13324.5	921.638	10154.3	344.201
62571.8	15253.4	1398.78	11124.2	503.451
67794.8	14190.0	1208.65	10551.8	242.570
72858.5	15205.7	876.487	10.8085	372.626
79841.7	1286.96	1299.85	13315.4	785.043
78145.9	14444.2	1621.87	12186.3	822.974
86120.2	12731.6	1119.11	13290.0	834.616

Ecuador

GNP	CON	RM	MS	CR	IP
15576.2	1147.38	1405.90	1981.45	2858.16	2154.19
15925.9	11710.2	1405.23	1939.00	3017.42	2233.11
16562.0	12232.6	1555.55	2119.40	2984.13	2074.07
17100.0	12570.0	1630.00	2240.00	2840.00	2150.00
18307.5	13742.7	1731.14	2417.78	3268.20	2263.06
18950.3	14170.6	1761.95	2417.99	3214.62	2256.67
20000.0	14914.5	1806.19	2619.26	3166.32	2268.23
21204.5	16013.8	1897.75	1922.41	3516.20	2573.66
22182.7	16611.3	2093.02	2350.50	4044.65	3131.23
23523.4	17564.1	2335.94	3390.63	4226.56	3703.13
25547.3	18771.4	2976.41	4020.65	4602.66	4056.06
25934.2	19705.1	2975.66	4555.33	4862.62	6385.46
28743.8	20805.9	4132.85	5344.39	3982.35	5733.42
33743.8	21601.2	5146.81	6380.57	4300.39	6295.86
40388.2	24651.2	6000.00	7600.38	4499.54	7646.52
42032.5	26173.1	5324.33	7495.43	4841.60	82972.4
45365.5	27668.6	6411.06	8875.65	5747.48	6695.27
1	2	3	4	5	6

YD	EX	EI	NX	NI
14039.3	1837.63	93.8794	2763.59	48.0952
14215.7	1956.79	106.779	2764.92	45.5338
14867.7	2498.61	88.6448	3044.74	55.7883
15460.0	2885.47	134.520	2867.28	72.7200
16286.3	2556.74	129.216	3074.57	145.926
17075.9	2741.27	132.026	3220.60	125.230
18010.8	2744.77	124.461	3053.78	185.544
18906.1	2781.62	164.655	3374.06	274.116
19892.0	2081.21	170.587	3849.74	311.084
21023.4	2923.61	149.721	4104.44	458.084
22777.4	3849.28	282.753	4717.44	524.557
23902.6	4371.95	490.362	6048.61	671.625
25295.3	7011.88	589.564	6482.49	661.843
28237.1	9190.14	1299.78	8433.27	523.247
35172.1	9855.15	1497.14	11747.6	706.386
37160.4	9295.69	1223.35	11984.3	795.612
40110.1	9208.85	2189.22	11410.1	880.384
7	8	9	10	11

Peru

	GNP	Consumption	I_p	Total Exports	∑EX	∑Ei	Total Imports	∑NX	∑Ni	i	MS
1960	55500	38400	6180	13500	12850.1	649.9	12000	11732.2	267.8	9.5	6560
1961	62300	43000	8080	15300	14891.4	498.6	14600	14283.8	316.2	9.5	7780
1962	71700	49500	9600	16700	15906.7	793.3	16300	15900.3	399.7	9.5	8070
1963	78700	57100	8020	16800	15918.1	881.9	17600	17259.6	340.4	9.5	9000
1964	95000	66500	6640	20500	19660.6	839.4	18600	17990.7	609.3	9.5	10500
1965	113000	82600	12280	20600	19727.7	872.3	22200	21248	952	9.5	12090
1966	134000	96700	13650	24200	23639.5	560.5	26500	25460.8	1039.2	9.5	14300
1967	152800	113500	14330	27400	26506.1	893.9	31800	30579.5	1220.5	9.5	16530
1968	181300	137700	9380	38200	37360	840	35300	33900	1400	9.5	24200
1969	198300	149800	11500	40400	39360	1040	35000	33400	1600	9.5	31400
1970	227500	175400	13090	48400	38400	1000	41900	40100	1800	9.5	39120
1971	262500	194800	17910	42800	41760	1040	42500	40100	2400	9.5	44230
1972	292200	218100	17730	46000	44760	1240	46100	42900	3200	9.5	56210
1973	355200	259400	23489	53100	51300	1800	54900	50940	3960	9.5	72540
1974	444300	332500	40150	72100	69380	2720	96400	90240	6160	9.5	102560
1975	551900	424800	53813	68800	63600	5200	122700	113460	9240	9.5	120030
1976	758300	577600	68971	100000	97240	2760	146600	133680	12920	12.5	151030

All Figures (except i) are in Millions of Soles

Venezuela

	GNP	Consumption	I_p	Total Exports	$\sum Ex$	$\sum Ei$	i	MS	RM	CR	Total Import	$\sum NX$
1960	23570	14350	2660	8270	8226.4	43.6	4.5	3570	2420	4080	5140	5130.1
1961	24680	14730	1890	9070	9032.3	37.7	4.5	3680	2510	4050	5050	5037.8
1962	26800	16070	2920	10200	10148.8	51.2	4.5	3600	2240	4260	5510	5494.5
1963	29330	17050	3150	10920	10880.9	39.1	4.5	3820	2540	4550	5390	5370.9
1964	32410	19530	4080	11380	11324.6	55.4	4.5	4270	2620	5410	7070	7034.3
1965	34430	21690	4530	11650	11496.1	153.9	4.5	4710	2810	6040	8000	7946.2
1966	36120	22730	4880	11280	11055.8	224.2	4.5	4900	2940	6180	7500	7434.2
1967	38350	23790	5030	11980	11723.5	256.5	4.5	5480	3270	6730	8020	7955.3
1968	38780	21160	6920	11250	11965.8	284.2	4.5	5950	3660	7500	9480	9403
1969	40540	23810	7100	12200	11892	308	5.5	6470	3850	8060	9740	9666.8
1970	44150	25960	7440	12760	12587.02	172.98	5	6960	4010	8860	10370	10288.68
1971	53070	28140	9380	14920	14711.36	208.64	5	8120	2970	9820	11780	11712.81
1972	58660	32390	11540	17400	17183.05	216.95	5	9730	5540	11460	12590	12500.67
1973	69380	34340	12687	25270	24991.22	278.78	5	12067	6925	14203	14390	14286.41
1974	108440	43620	14070	66170	65853.85	316.15	5	17333	9647	18968	21520	21302.29
1975	11340	54550	15733	49450	48771.49	678.51	7	26055	13656	28699	30360	29803.35
1976	13352	65190	21760	42190	41205.85	984.15	7	29884	16214	39290	37970	37271.6

All figures are in millions of Bolivares

Venezuela

				Index			
	$\sum Ni$	Tax Revenue	Cu	PI	P	PX	PM
1960	9.9	4970	0	106.8	102	109	82
1961	12.2	5850	0	99.3	99.3	115	85
1962	15.5	5910	0	98.9	98.9	113	94
1963	19.1	6600	0	100	100	100	100
1964	35.7	7130	0	116.1	102.1	126	103
1965	53.8	7260	0	123.8	103.9	127	111
1966	65.8	7750	0	121.1	105.6	127	115
1967	64.7	8540	0	112.6	105.7	126	119
1968	77	8780	0	119	107.1	120	121
1969	73.2	8660	0	130.1	109.7	121	123
1970	81.32	9500	0	136.1	112.4	123	127
1971	67.19	11640	0	142.5	116.1	130	134
1972	89.33	12190	0	156.5	118.9	139	150
1973	103.59	17231	1000	190.7	123.9	134.1	198
1974	217.71	44579	1000	241.1	134.1	177.1	546
1975	556.65	42941	1000	273.6	147.8	234.9	590
1976	698.4	40536	1000	319.7	159	246	611

Note: Membership in customs union, the dummy variable Cu, for Venezuela is different. Venezuela joined the Andean Group in 1973.

Peru

```
   GNP             CON             RM              MS              CR              IP
......................................................................................

 67191.3         45468.1         6525.42         7841.86         9226.16         5617.85
 70564.9         48887.6         7270.66         8610.57         10271.6         7461.46
 76276.6         52856.5         7658.57         8585.10         11469.4         9142.65
 78700.0         57100.0         8169.99         9000.00         11670.0         8019.99
 85872.8         60161.0         9176.46         9502.26         12072.4         6629.99
 87461.3         63831.6         8784.82         9357.56         12530.9         12156.4
 94766.6         66367.5         8734.08         10113.1         12029.7         13362.3
 98390.2         73084.3         8712.18         10643.9         8615.66         13912.6
 97530.8         74151.6         7905.22         13031.6         10718.2         8933.33
 101173.         78426.5         9367.34         16020.4         11166.4         12105.3
 110276.         85021.6         15870.4         18982.7         11626.7         13936.5
 119156.         86424.6         17276.4         20077.2         13041.3         18457.4
 123971.         92532.6         20787.8         23646.1         14619.7         15967.4
 137635.         100660.         23776.7         26149.0         16693.6         22716.6
 147217.         110172.         26929.7         33962.6         15211.5         39566.6
 147923.         113857.         27510.0         32171.0         15966.2         9664.97
 152300.         118007.         27917.2         30333.4         14614.5         67951.6

    1               2               3               4               5               6

   VD              EX              EI              MX              MI
.........................................................................

 58707.0         9311.66         470.942         14203.8         324.213
 58644.8         11654.6         392.598         16176.4         358.087
 64085.1         12330.2         614.981         15915.2         428.213
 64790.0         15918.1         661.900         17259.6         340.400
 70524.4         17398.6         742.632         18261.3         551.402
 75425.8         17306.0         765.176         18445.8         725.842
 81973.1         17908.7         424.621         18006.3         734.938
 86976.5         18031.4         606.096         15880.8         785.898
 82283.9         16864.5         428.398         18255.3         753.904
 84704.1         18923.1         500.000         17040.6         616.328
 91357.2         17534.3         456.621         19437.7         672.519
 100272.         20660.0         520.000         18202.4         1068.42
 104808.         22458.6         622.177         18201.1         1357.88
 117127.         14281.7         501.114         19757.2         1538.67
 124800.         16677.9         653.849         26800.8         2041.09
 124363.         17189.2         1405.41         3044.76         2476.55
 129826.         17345.7         482.330         26846.8         2894.90
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Venezuela

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   GNP             CON             RM              MS              CR              IP
......................................................................................

 23107.8         14066.6         2372.55         3500.00         4000.00         2490.84
 24854.0         14633.6         2527.69         3706.84         4076.65         1903.32
 27088.1         15246.7         2264.81         3640.04         4307.34         2852.47
 29330.0         17060.0         2540.00         3620.00         4549.99         3160.00
 31743.4         19128.3         2566.11         4182.17         5298.72         3514.21
 33137.6         20675.6         2704.52         4523.20         5613.24         3659.12
 34204.5         21524.6         2784.08         4640.14         5652.27         4029.72
 36281.9         22507.1         3093.66         5164.46         6367.07         4467.14
 36209.1         19757.2         3417.37         5656.55         7002.80         5615.12
 38955.3         21704.6         3527.60         5687.90         7347.30         5457.34
 39276.3         23066.1         3567.51         6182.16         7662.56         5466.56
 45710.6         24237.7         4260.78         6963.86         8456.22         6562.45
 49336.6         27241.4         4659.37         8182.34         9636.35         7373.80
 55986.6         27716.9         5589.16         9735.30         11463.3         6652.65
 60865.0         32628.0         7193.86         12525.4         14144.7        -2568.55
 76684.7         39908.0         9238.61         17526.5         18417.4         2065.29
 63974.8         41000.0         10187.5         18786.0         24710.7         6606.36

    1               2               3               4               5               6

   VD              EX              EI              MX              MI
.........................................................................

 18236.3         7547.15         40.0000         6266.21         12.0732
 18982.7         7654.17         32.7626         5926.62         14.3529
 21122.3         8861.23         46.3097         5646.21         16.4883
 22730.0         10880.9         35.1000         5370.90         19.1000
 24750.0         8887.77         43.9662         6629.41         34.6602
 26150.1         9052.04         121.161         7168.73         46.4684
 26668.5         8706.35         176.535         6464.52         57.2174
 28202.4         9304.35         203.571         6665.12         64.3687
 28011.2         9971.50         236.633         7771.07         63.6364
 29081.1         9828.10         284.545         7658.16         59.5122
 30627.4         10233.3         140.624         8101.32         64.0315
 35684.7         11316.4         180.492         8740.90         50.1416
 39083.3         12261.9         166.079         8233.78         59.5523
 42089.6         16636.3         207.868         7216.36         52.3182
 47621.9         27164.6         176.515         3801.52         39.6736
 47631.3         20762.7         286.850         8051.41         94.3474
 56467.9         18760.3         400.061         8100.10         114.304
```

Estimation Procedure and Problems

The parameters of the model for each member have been estimated separately. Since the feedback effects in the model are limited, ordinary least squares was used as the estimation procedure. Two-stage least squares was also tried with not much improvement in the results.

There are several sources of bias in ordinary least squares estimates in a highly aggregative model of this kind. One of the assumptions of ordinary least squares is that the error term in the relationship is uncorrelated with the explanatory variables. If the relationship being estimated is part of a simultaneous system, as it is in our model, this assumption would be violated. In case of imports equations, it is generally believed that ordinary least squares techniques are appropriate when the importing country absorb only a small fraction of total world supply. In our model the import supply curve, especially extra-regional, can be assumed to be fairly elastic.

Another source of bias is errors in variables. If there was an error in the independent variable, the estimate of the corresponding coefficient would be biased toward zero. In addition to errors in variables, the error term in the regression relationship is a product of many factors such as omitted variables, special circumstances in certain periods and lack of correct functional form, etc. There is also possibility of correlation of the error of terms with the predetermined variables. This may reflect an error in measurement of one of the independent variables or it may likely arise when some of the variables treated as predetermined in the estimation equations (in two stage least squares method) are in fact endogenous or lagged endogenous variables. This violates the traditional assumption of independence of the error term and independent variable and biased estimates are again the result.

There is a possibility of small sample bias. All equations in the model have been estimated upon the basis of 17 observations. Some questions can be raised about the ability of the model's parameters in predicting years beyond those of the sample. The attempt was to estimate the same model for each member within the region. A number of estimates were carried out, among which the best were chosen for each member country for presentation. Following conventional practice, forms in which the regression coefficients had the wrong signs or were insignificant have been rejected.[7] Linear relationships were used throughout the study. Income distribution and its effects on the macroeconomic variables have been omitted throughout the study due to lack of data.

The study may well be deficient in its treatment of any adjustment

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[7] Durbin Watson statistics was used in selection of estimates. However, in some cases certain equations had to be used though Durbin-Watson statistics did not fall within the "nonrejection bounds". According to the tables presented by Durbin and Watson, the following numbers represent cut-off values:

Number of Explanatory variables in the Estimating Equations

	1	2	3	4	5
DW_U	1.36	1.54	1.75	1.97	2.21
DW_L	1.08	.95	.82	.69	.56

process, if no lagged variables are introduced. In fact, ideally, both leads and lags should be introduced into the analysis. On the other hand with only seventeen observations for each member country, the loss of degrees of freedom would be costly with lags of long durations. Time lag was used and is presented where it is found to be significant.

Basic Findings

Results of estimates are provided in the following pages. The numbers in parentheses indicate "t" statistics, D.W. indicates the Durbin Watson statistics and $\bar{R}^2$ indicates the coefficient of determination corrected for degrees of freedom. Equations which are not shown in these results are the identities which are the same for all countries. Table 5-1 through 5-8 provide estimates of the influence of the various macroeconomic policy instruments at the disposal of the governments of the member countries (as well as other exogenous variables) on each of the most important goals of the development plans in the region.

Each of the governments in Andean Common Market has a development plan or some other strategy in order to achieve increases in per capita income as well as price stability, increase in the stock of international reserves or reduction in external debts, and political stability. The basic objective of the following estimates is to examine the effect of integration. The results also can be used as a basis for the formulation of policies at furthering the goals of economic development of Andean Common Market, at the region and national level.

Consumption:

As Table 5-1 indicates, among many estimates for the consumption function, disposable income and institutional changes have the most influence on total consumption in Bolivia. As this table indicates the marginal propensity to consume is high in Bolivia. The data for interest rates were not available. For Chile disposable income, interest rate and institutional changes seem to be the most significant variables affecting aggregate consumption in Chile. Note the important difference concerning the influence of institutional changes on consumption in Bolivia and Chile. During past few years the effects of institutional changes on consumption have been positive in Bolivia and negative in Chile. For Colombia wealth[8] has a negative but insignificant influence on aggregate consumption. The same applies to Ecuador. Disposable income and institutional changes indicated by the passage of time affect aggregate consumption the most in Colombia. The influence of institutional changes on consumption has been positive and significant. Table 4-1 indicates the same conclusion

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8. The attempt is to apply the concept of permanent income, including nonhuman wealth as a separate variable in the consumption function. The aggregate permanent income in any period could be presented by an average of actual aggregate income over two or more years, substituting the idea of "normal income" for "permanent income", defining normal income in terms of a trend or average income over a number of past period. This definition, then, would be in line with what has been used in the case of time series data estimations. Robert Ferber, "Consumer Economics, A Survey", Journal of Economic Literature, December, 1973, pp. 1303-1333.

for Ecuador. However the only significant factor which affects aggregate consumption in Ecuador is the institutional factor. Consumption in Peru depends largely on the stock of wealth and disposable income. The influences of institutional changes on consumption in Peru are similar to those in Bolivia, Colombia and Ecuador. Venezuela is an oil exporting country and a member of OPEC (Organization of Petroleum Exporting Countries). However, the basic model for estimation has been the same as for the non-oil exporting members. As Table 5-1 indicates, disposable income, wealth and interest rate are the most significant factors affecting aggregate consumption in Venezuela. According to Table 5-1 Chile has the highest MPC (exceeding one) and Ecuador has the lowest MPC in the region. In between are Bolivia, Colombia, Peru and Venzuela with MPC of .78, .67, .49, and .39 respectively. The real rate of interest either does not have a significant influence on aggregate consumption in member countries or the effect is positive. However, in a number of both lead and lag estimates, the positive effect of real interest rate became either insignificant or the influence appeared negative. With the exception of Chile, the effects of institutional changes on aggregate consumption in the Andean Common Market have been positive. In contrast to similar study carried out by Nugent[9] for the Central America Common Market, disposable income is not the only basic factor affecting aggregate consumption in Andean Group. The institutional factor and to some extent wealth influence consumption in the Andean Common Market.

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9. Nugent, Jeffrey B., Economic Integration in Central America, Empirical Investigations (The John Hopkins University Press; 1974), Ch. 4, pp 94-105.

TABLE 5-1

Estimation of Consumption

Country	constant	Yd	W	$(i - \frac{\Delta P}{P})$	Time	R^2	D.W.
Bolivia	6.42562	.786542 (11.3947)	-	-	.000436 (1.21152)	.9859	1.8780
Chile	-	1.25994 (11.4575)	-	6.4474 (1.59240)	-.0178591 (1.92838)	.9563	1.5091
Colombia	51.8754	.674393 (9.10368)	-.0229008 (.0766677)	-.783084 (.481811)	.004829 (2.56968)	.9966	2.5760
Ecuador	52.6362	.257967 (.606963)	-.604040 (.486700)	-	.010505 (3.23467)	.8996	1.4354
Peru	166.482	.404690 (3.70313)	.388207 (2.49718)	3.93015 (.655718)	.0186904 (4.91200)	.9969	1.8283
Venezuela	25.5531	.397873 (2.48986)	.394402 (1.35462)	9.39006 (1.19247)	.0008914 (.411779)	.9833	1.2866

According to the analysis of previous chapters, the ultimate purpose of economic integration is to achieve an increase in welfare for member and possibly for the rest of the world. In the case of developing countries, the ultimate purpose of economic integration is to achieve an acceleration of economic growth in member countries. Through integration larger markets are created which in turn are expected to open up investment opportunities. As Table 5-2 indicates, the formation of Andean Group, so far, has not influenced investment opportunities for its members. However, in a number of lag estimates the result improved significantly. For instance in the case of Chile, the coefficient of Cu increased from .41 to 2.35 with the introduction of one year lead period. For Peru it changes from -.013 to -.0053. The basic factors affecting aggregate private investment of members are provided in Table 5-2.

Investment:

Among many estimates of the private investment function, it seems that GNP has the most important influence on aggregate private investment in Bolivia. In Chile, the most significant factors affecting private investment are GNP and institutional changes. Institutional factors during the past few years have had a negative influence on investment in Chile. Investment activities were affected by political turbulence and the climate of uncertainty created by the disorders which ensude. In Colombia also institutional changes are the most significant factor influencing private investment. In Ecuador private investment depends on GNP and the real rate of interest. In Peru the real rate of interest is the basic factor affecting the level of private investment. The effect of membership

Table 5-2

Estimation of Private Investment

Country	Constant	GNP	$GNP_t - GNP_{t-1}$	Cu	$i - \frac{\Delta P}{P}$	Time	D.W.	R^2
Bolivia	-.957985	.141848 (3.00406)	.002653 (.043313)	-.0007995 (.284384)	-	-	1.3431	.6886
Chile	-	1.85316 (4.32852)	-	.419933 (.680099)	5.81435 (2.38780)	-.152441 (2.01611)	1.9884	.8423
Colombia	76.7308	-.074547 (.465746)	-	.012808 (.454415)	1.77992 (.035621)	.005253 (.105567)	2.0738	.6782
Ecuador	-	2.05278	-	.137276 (.758121)	-63.0581 (1.52568)	-.0125168 (.42255)	2.9295	.3084
Peru	49.4220	-.167334 (.441332)	.063369 (.327623)	-.013799 (.114935)	-1.55769 (2.24391)	-	2.9146	.6382
Venezuela	21.3108	.065193 (.892521)	-	-.037387 (1.14991)	-	-	1.9595	.0923

in the Andean Group on private investment is negative but insignificant. One should not expect an immediate positive effect on investment following economic integration. Time is required for the reallocation of resources due to enlargement of markets. As Table 5-2 indicates the real rate of interest has a significant influence on investment in Peru and Ecuador. Its effect is insignificant in Colombia and Venezuela. In Chile, there is a positive and significant relation between real rate of interest and investment as Table 5-2 indicates. However, after a number of estimates with lag were introduced the outcome changed. The introduction of lag made investment less sensitive to interest rate.

Extra-regional Exports:

The major export of Bolivia is tin for which the foreign demand has gone up considerably during the past two decades. A positive and significant relationship between the extra-regional exports of Bolivia and the foreign demand for its exports including tin, crude petroleum, zinc, and tungsten is expected. However, in our findings there is a negative though insignificant relation between extra-regional exports and foreign demand (Table 5-3). Availability of credit[10] to the private sector has the strongest effect on the extra-regional exports of Bolivia.

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[10] It does not include foreign sources or any source within the common market. If we include any financial institution within the Andean Group such as CAF the availability of credit certainly could be enhanced by participation in the customs union.

TABLE 5-3

ESTIMATES OF EXTRA-REGIONAL EXPORTS

Country	Constant	FD	Cu	CR	TIME	R^2	D.W.
Bolivia	5.60289	-.022152 (.344839)	-.002854 (.770624)	2.65907 (2.72049)	.000306 (.327195)	.8694	1.3321
Chile	-30.5994	219.615 (.527270)	-34.5573 (1.77942)	1077.13 (6.35847)	-1.53676 (.256019)	.9072	1.9804
Colombia	12.9197	.362201 (.517431)	-.008657 (.221782)	-	.002558 (.293260)	.4577	2.0396
Ecuador	7.12055	.040161 (.156551)	.018651 (1.30375)	-	.003062 (.957785)	.8064	.4604
Peru	131.905	-.048060 (.096271)	-.032062 (1.15173)	-	.007083 (1.13839)	.4003	1.0062
Venezuela	68.3031	.220844 (2.80929)	.120400 (3.07941)	-	-.000760 (.070929)	.6796	2.4358

As Table 5-3 indicates membership in the Andean Common Market has improved the competitiveness of (only) Ecuador in world Market. In other words, comparing the trend in time variable and membership in the customs union (Cu), the former is positive and the latter is negative in Bolivia, Colombia, and Peru. It is the opposite in Venezuela. Availability of credit to the private sector plays a major role in affecting extra-regional exports only in two member countries, Bolivia and Chile. Venezuela is an oil exporting country and a member of OPEC. In addition to crude petroleum Venezuela exports large amount of iron ore. As Table 5-3 indicates, among members of the Andean Common Market, Venezuela is the only country in which foreign demand plays a significant role in influencing extra-regional exports. A number of lag estimates were carried out for all members, considering the nature of exports of these countries and the low elasticities of supply. The result was that foreign demand plays a significant role in affecting extra-regional exports in Bolivia and Ecuador too, provided a time lag of one or two years period. Table 5-3 indicated that membership in the Andean Common Market has reduced extra-regional exports of Bolivia, Chile, Colombia and Peru. There are two explanations for this outcome. First, we might conclude that formation of Andean Group has shifted the exports of Bolivia, Chile, Colombia and Peru from the outside world to the other members within the Group. Second considering the trend in Cu (membership in the Andean Common Market) and institutional factor (competitiveness indicated by time), we might say that formation of the Andean Group has improved the competitiveness of exports of these members. This improvement is presented by the positive coefficients of time.

Intra-regional Exports:

Estimates of intra-regional exports of member countries are provided in Table 5-4. Intra-regional exports were assumed to be affected by credit to exporters, factors affecting competitiveness that vary with time, and total imports of other members of the Andean Common Market as already explained. However, the results of estimates indicate that out of these three variables, availability of credit followed by institutional changes have the most signigicant influence on intra-regional exports. Time has a positive and significant effect on intra-regional exports of Colombia and Venezuela. This efect is negative and significant for Chile, negative though insignificant for Peru. With the exception of Colombia, availability of credit to the exporters is a very significant factor in promoting exports to partners for all members of Andean Common Market.

Extra-regional Imports:

Estimates of extra-regional imports are provided in Table 5-5. Extra-regional imports were assumed to depend on GNP, availability of credit of the importers, passage of time as well as membership in the Common Market. As Table 5-5 indicates all these factors are significant in (almost) all of the member countries. Note the opposite trend in Cu (membership in the union) and time. GNP is the key factor influencing extra-regional imports of Bolivia, Ecuador and Peru. Comparison of Table 5-3 and 5-5 indicates that membership in the Andean Common Market has reduced Bolivian's extra-regional trade. However, for Ecuador it is the opposite. For other members it is mixed. Passage of time is a significant factor affecting extra-regional imports of Venezuela. The level of

TABLE 5-4

ESTIMATES OF INTRA-REGIONAL EXPORTS

Country	Constant	CR	$\sum_{j=1}^{5} M_{ij}$	TIME	R^2	D.W.
Bolivia	-.264059	.184355 (1.31976)	-.000095 (.484225)	.000015 (.156766)	.6539	1.1499
Chile	-673.862	130.084 (8.18095)	-.224090 (.225927)	-.192425 (1.04459)	.8851	2.0392
Colombia	-2.04294	-	.0010622 (1.35492)	.000956 (7.83726)	.8693	.8694
Ecuador	-16.3951	.537310 (3.93593)	.000928 (.630946)	-	.6123	.7675
Peru	-.346161	.058637 (1.46383)	-	-.0001 (.545836)	.1745	2.2465
Venezuela	.163602	.008357 (1.58741)	-.000106 (.473258)	.000096 (1.73388)	.7395	.8491

TABLE 5-5

ESTIMATES OF EXTRA-REGIONAL IMPORTS

Country	Constant	GNP	Cu	CR	TIME	R^2	D.W.
Bolivia	-2.81170	.284719 (7.41865)	-.005526 (3.62235)	-	.000053 (.237795)	.9629	2.7030
Chile	11.4834	.018474 (.32590)	.028099 (1.94970)	.10088 (.150131)	-	.5774	2.4653
Colombia	-114.055	-	.086983 (2.22179)	2.70283 (2.42819)	-.012899 (1.89129)	.5205	2.3042
Ecuador	-43.4685	.473730 (8.80053)	.001654 (.240369)	-.013943 (.027348)	-.003013 (2.43971)	.9655	2.2948
Peru	172.586	.114331 (1.33474)	-	-.911261 (.878365)	-	.1210	3.0082
Venezuela	58.0077	-	-.030530 (3.29025)	-.058168 (.630046)	.00264375 (3.28815)	.6468	2.4154

international reserves which has increased from 1973 due to sharp increase in the price of petroleum is a key factor affecting extra-regional imports. During the 1970's the balance of payments improved considerably due to trade surpluses and reduction in current account deficits. This in turn made more imports possible.

Intra-regional Imports:

Estimates of Intra-regional imports for member countries are provided in Table 5-6. GNP is the most significant variable affecting intra-regional imports in Bolivia and Peru. The marginal propensity to import from the rest of the world is higher than the marginal propensity to import from the partners in the region. As Table 5-6 reflects, the marginal propensity to import from partners is low. Peru has the highest marginal propensity to import (MPM) of .05 and Chile has the lowest MPM of .002 in the region. In between are Colombia, and Bolivia, excluding Ecuador and Venezuela. The income elasticity of demand for goods imported which vary from country to country depending on the goods imported in each country may cause the differences in the MPM in members.

Formation of Common Market has enlarged intra-regional imports of Chile, Colombia and Ecuador significantly. A comparison of Tables 5-5 and 5-6 reveals that in both Bolivia and Venezuela there has been a negative relation between membership in the union and imports, both intra and extra-regional. The same thing applies to institutional changes in Bolivia. Availability of credit to importers either from domestic source or from CAF plays a major role in enhancing intra-regional imports in only three members of the union (Colombia, Ecuador

TABLE 5-6

ESTIMATES OF INTRA-REGIONAL IMPORTS

Country	Constant	GNP	CR	CU	TIME	R^2	D.W.
Bolivia	-.755837	.0269317 (2.78086)	.089564 (.902764)	-.000076 (.410557)	-.000142 (4.23398)	.8892	2.7198
Chile	1.79235	.002375 (.911855)	-	.005452 (1.54981)	-.000086 (.186024)	.3612	1.7934
Colombia	-12.6054	.008124 (.67536)	.137234 (1.93024)	.004650 (1.61966)	-.000338 (.871386)	.9206	2.3680
Ecuador	-3.44678	-.005018 (.795494)	.145185 (2.43005)	.001667 (2,06666)	.000283 (1.95934)	.9441	2.8786
Peru	-31.5851	.05278 (4.30488)	-.019641 (.466858)	-.002710 (1.29382)	-.00127 (2.14333)	.9423	1.4119
Venezuela	-.019233	[illegible]	.004843 (3.80914)	-.000423 (3.30985)	.000024 (2.17886)	.8530	1.6223

and Venezuela). The influence of the passage of time on intra-regional imports is not similar in partners. It is negative in Bolivia, Chile Colombia and Peru, though the degree of significance varies from one member to another. In Ecuador and Venezuela the institutional changes have resulted in a positive and signifcant effect on intra-regional imports.

Credit:

The link between credit, money supply and aggregate consumption is clear from Tables 5-1, 5-7 and 5-8[11]. As Table 5-7 indicates, there is a positive and significant relationship between money supply and the availability of credit in (almost) all members of the Andean Common Market. Institutional changes are important in influencing the availability of credit only in Bolivia and Ecuador. As Table 5-7 indicates, there is a negative coefficient for time in Chile. This may be attributed to political turbulence and the climate of uncertainty which prevailed in Chile during the period of study.

Money Supply:

Estimates of money supply for members of Andean Common Market are provided in Table 5-8. Monetary authorities are expected to reduce

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[11] This finding is actually in line with other basic findings in the literature that the size of the purchase of durable goods varies positively with the use of credit and that the link between credit, money supply and consumption is positive. See Robert Ferber,"Consumer Economic: A Survey", Journal of Economic Literature, December 1973, pp. 1303-1333.

TABLE 5-7

ESTIMATES OF CREDIT

Country	Constant	M.S.	TIME	R^2	D.W.
Bolivia	-3.02677	.578960 (2.31252)	.000158 (1.90009)	.9426	.2497
Chile	5.57531	1.18797 (6.04223)	-.001732 (.907406)	.8420	1.1722
Colombia	44.630	.532986 (5.07554)	-	.6320	1.1893
Ecuador	26.5830	.029303 (.307049)	.001413 (3.19543)	.8298	1.1206
Peru	88.2375	.252182 (2.51088)	-.000831 (.449727)	.7173	1.2860
Venezuela	.656332	1.17778 (13.2528)	.000136 (.162313)	.9802	1.6292

fluctuations in the interest rate by expanding or contracting the money supply as interest rates tend to rise or fall. In our model the emphasis is on supply of money, considering interest rates as exogenous. As Table 5-8 indicates, for all members in the Andean Group there is a positive and highly significant relationship between reserve money (RM) and money supply (MS). In Chile and Ecuador GNP, RM, interest rate and institutional changes are important factors influencing supply of money. The effect of passage of time on money supply varies from one member to another. This influence is positive in all partners except in Ecuador and Venezuela. In Colombia and Peru the effect is insignificant though positive. Reserve money is the most important factor influencing supply of money in all members of the region.

TABLE 5-8

ESTIMATES OF MONEY SUPPLY

Country	Constant	GNP	RM	$\left(i - \frac{\Delta P}{P}\right)$	TIME	R^2	D.W.
Bolivia	1.17346	-.003191 (.406118)	.861499 (10.8707)	-	.000137 (2.51380)	.9930	1.6798
Chile	-.974083	.027610 (1.55560)	-.555825 (3.10698)	.088784 (4.23818)	.000905 (1.69070)	.9894	2.5623
Colombia	21.3593	.009623 (.243701)	1.21313 (5.11628)	.105866 (.118861)	.0000119 (.0112746)	.9811	1.1399
Ecuador	-20.7599	.134512 (2.73326)	.700414 (2.90470)	2.18905 (2.05814)	-.000969 (1.96308)	.9892	2.2667
Peru	74.9832	.0501197 (.308941)	.753072 (3.30101)	-10.2612 (1.72585)	.004042 (.664557)	.9797	1.3436
Venezuela	-22.8898	.0139361 (.723814)	1.79696 (11.3449)	3.16222 (1.68920)	-.000229 (.699810)	.9981	2.7458

CHAPTER VI

REDUCED FORM SOLUTION TO THE MODEL

The purpose of the last chapter was to build a small econometric model for each member country to provide estimates of the influence of the various macroeconomic variables on each of the most important targets that are set in the development plans. The highly aggregated model of the last chapter was to indicate the interrelationships between GNP, GDP Private Consumption, Private Investment, Exports, Imports, the Balance of Payments and Government Deficits and policy instruments such as reserve money, government expenditures as well as other variables such as institutional changes, the level of foreign demand, etc. The model was also used as a means to assess the effect of integration on the economies of the member countries. The purpose of this chapter is to provide reduced form solutions for the model of the la[illegible] chapter. This chapter deals with the analysis of policy multipliers obtained from the reduced form solutions.

Complete Solution to the Model:

The model consists of 13 equations per country which when expanded to include two years, makes 26 equations. These systems of 26 equations per country can be fitted together to make one big model of Andean Common Market consisting of 26×6 or 156 equations. Adding the following identities for each of the two periods yields a complete system consisting of 160 equations.

$$\overset{\text{A.C.M.}}{GNP} = \overset{\text{Bol.}}{GNP} + \overset{\text{Chile}}{GNP} + \overset{\text{Col.}}{GNP} + \overset{\text{Ecua.}}{GNP} + \overset{\text{Peru}}{GNP} + \overset{\text{Ven.}}{GNP}$$

$$\overset{\text{A.C.M.}}{I} = \overset{\text{Bol.}}{I} + \overset{\text{Chile}}{I} + \overset{\text{Col.}}{I} + \overset{\text{Ecua.}}{I} + \overset{\text{Peru}}{I} + \overset{\text{Ven.}}{I}$$

For each year t and $t + 1$

This system of 160 equations is of the form

$$IY = AY + BX$$

Where I is the identity matrix and Y is the vector of 160 endogenous variables and X is a vector of 69 predetermined variables and a constant term. A and B are matrices of dimensions 160×160 and 160×70, respectively. The solution to this system is given by :

$$Y = (I-A)^{-1}BX$$

which is the reduced form of the model because each of the 160 endogenous variables contained in Y is expressed as a linear function of the 70 predetermined variables.

The calculations have been to subtract the 160×160 A matrix from 160×160 I matrix, to invert this matrix, and to postmultiply it by the 160×70 B matrix. The resulting $(I-A)^{-1}B$ matrix is 160×70 which is presented in the following pages. Such a matrix of coefficients expresses in quantitative terms the impacts of each of the 70 predetermined variables on each of the 160 endogenous variables.

	[illegible]	2	3	4	5	6	7	8	9	10
1	0.52613	0.52613	0.47387	0.41038	4.15121	0.00074	-0.01454	-0.01052	-0.00005	0.70692
2	0.52613	0.52613	-0.52613	0.41038	4.15121	0.00074	-0.01454	-0.01052	-0.00005	0.70692
3	0.52613	0.52613	-0.52613	-0.58962	4.15121	0.00074	-0.01454	-0.01052	-0.00005	0.70692
4	-0.41038	-0.41038	0.41038	0.45991	3.16206	-0.00018	0.01064	0.00821	0.00004	-0.55140
5	0.07366	0.07366	-0.07366	0.05745	-0.36833	0.00010	-0.02404	-0.02147	-0.00001	0.09897
6	-0.00238	-0.00238	0.00238	-0.00186	-0.65453	0.00089	0.00007	0.00005	0.00000	1.29583
7	-0.00016	-0.00016	0.00016	-0.00013	-0.68484	0.00005	-0.00500	0.00000	-0.00009	0.08802
8	0.12101	0.12101	-0.12101	0.09439	-1.84522	0.00022	-0.00341	-0.00242	-0.00001	0.16259
9	0.01360	0.01360	-0.01360	0.01061	-0.85213	-0.00010	-0.00038	-0.00027	-0.00000	0.05190
10	-0.00090	-0.00090	0.00090	-0.00070	-2.30020	0.00022	0.00002	0.00002	0.00000	0.48899
11	-0.00158	-0.00158	0.00158	-0.00123	1.15755	0.00013	0.00004	0.00003	0.00000	0.85788
12	-0.13715	-0.13715	-0.86285	-0.10698	1.35799	0.00082	-0.00114	0.00274	-0.00008	1.15935
13	-1.00000	-1.00000	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.08077	-0.08077	0.08077	-0.14434	15.13169	-0.00236	-0.28967	0.14492	0.00001	-1.57281
15	-0.08077	-0.08077	0.08077	-0.14434	15.13169	-0.00236	-0.28967	0.14492	0.00001	-1.57281
16	-0.08077	-0.08077	0.08077	-0.14434	15.13169	-0.00236	-0.28967	0.14492	0.00001	-1.57281
17	0.04280	0.04280	-0.04280	-0.04796	5.63766	0.00006	-0.00118	-0.00086	-0.00000	0.05750
18	0.03157	0.03157	-0.03157	0.02462	0.01907	0.00004	-0.00087	-0.00063	-0.00000	0.04242
19	0.00233	0.00233	-0.00233	0.00182	7.62500	-0.00058	0.00894	0.14325	-0.00000	-1.26899
20	0.00012	0.00012	-0.00012	0.00010	0.54099	-0.00003	-0.30000	-0.00000	-0.00000	-0.06650
21	0.11838	0.11838	-0.11838	0.09234	-1.01598	0.00021	-0.00237	-0.00237	-0.00001	0.15906
22	0.03921	0.03921	-0.03921	0.03059	-0.29299	0.00165	-0.00108	-0.00078	-0.00000	0.17818
23	0.00278	0.00278	-0.00278	0.00217	7.43159	-0.00023	-0.00008	-0.00006	-0.00000	-1.51265
24	-0.06156	-0.06156	0.06156	-0.04801	18.38201	0.00191	0.00170	0.00123	0.00001	-0.08271
25	-0.15513	-0.15513	0.15513	-0.12100	9.47496	-0.00247	-0.28761	0.14640	0.00001	-3.49140
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.00000	0.00000	-0.00000	0.00000	-75.86625	0.23487	-0.04904	-25.64864	-0.00000	0.00000
28	0.00000	0.00000	-0.00000	0.00000	-75.86625	0.23487	-0.04904	-25.64864	-0.00000	0.00000
29	0.00000	0.00000	-0.00000	0.00000	-75.66625	0.23487	-0.04904	-25.64864	-0.00000	0.00000
30	0.0	0.0	0.0	0.0	0.0	-0.01790	0.0	0.0	0.0	0.0
31	0.00000	0.00000	-0.00000	0.00000	-154.59230	0.28325	0.32902	172.07896	-0.00000	0.00000
32	-0.00000	-0.00000	0.00000	-0.00000	-95.95487	-0.74950	-0.17096	-89.41215	0.00000	-0.00000
33	-0.00000	-0.00000	0.00000	-0.00000	186.98006	0.72182	-0.20771	-108.63159	0.00000	-0.00000
34	0.00000	0.00000	-0.00000	0.00000	10.66087	0.00242	-0.00051	-0.26484	-0.00000	0.00000
35	0.00000	0.00000	-0.00000	0.00000	1.63827	0.00039	-0.00010	-0.05130	-0.00000	0.00000
36	-0.00000	-0.00000	0.00000	-0.00000	1.95369	0.00701	-0.00160	-0.83563	0.00000	-0.00000
37	0.00000	0.00000	-0.00000	0.00000	-3.06467	0.00738	-0.00135	-0.70816	-0.00000	0.00000
38	-0.00000	-0.00000	0.00000	-0.00000	78.72605	-0.03048	-0.37806	-197.72760	0.00000	-0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	0.00000	-0.00000	0.00000	106.20085	0.26571	-0.08876	-46.42378	-0.00000	0.00000
41	0.00000	0.00000	-0.00000	0.00000	106.20085	0.26571	-0.08876	-46.42378	-0.00000	0.00000
42	0.00000	0.00000	-0.00000	0.00000	106.20085	0.26571	-0.08876	-46.42378	-0.00000	0.00000
43	0.00000	0.00000	-0.00000	0.00000	-236.66656	0.10491	-0.01226	-6.41216	-0.00000	0.00000
44	0.00000	0.00000	-0.00000	0.00000	106.20085	0.26571	-0.08876	-46.42378	-0.00000	0.00000
45	-0.00000	-0.00000	0.00000	-0.00000	19381.00072	34.23266	-0.60109	-317.05850	0.00000	-0.00000
46	-0.00000	-0.00000	0.00000	-0.00000	-2859.31544	-0.05171	-0.00710	-3.71453	0.00000	-0.00000
47	0.00000	0.00000	-0.00000	0.00000	10.52927	0.01306	-0.00259	-1.35663	-0.00000	0.00000
48	-0.00000	-0.00000	0.00000	-0.00000	1.49907	-0.00012	0.00005	0.02568	0.00000	-0.00000
49	0.00000	0.00000	-0.00000	0.00000	-2.12484	0.00590	-0.00070	-0.36506	-0.00000	0.00000
50	-0.00000	-0.00000	0.00000	-0.00000	10.85409	-0.06159	0.01318	6.89410	0.00000	-0.00000

```
              1            2            3            4            5            6            7            8            9           10
 51    -0.00000     -0.00000      0.00000     -0.00000  16509.65694     34.16801     -0.60565   -319.44205      0.00000     -0.00000
 52     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 53    -0.00000     -0.00000      0.00000     -0.00000    233.90045      0.31040     -0.19134      0.79211      0.00000     -0.00000
 54    -0.00000     -0.00000      0.00000     -0.00000    233.90045      0.31040     -0.19134      0.79211      0.00000     -0.00000
 55    -0.00000     -0.00000      0.00000     -0.00000    233.90045      0.31040     -0.19134      0.79211      0.00000     -0.00000
 56    -0.00000     -0.00000      0.00000     -0.00000    201.03114      0.20341     -0.12241      0.50678     -0.00000     -0.00000
 57     0.00000      0.00000     -0.00000     -0.00000     59.29586     -0.01814      0.02706     -0.05904     -0.00000     -0.00000
 58     0.0          0.0          0.0          0.0         12.91970      0.00200     -0.00866      0.36220      0.0          0.0
 59     0.0          0.0          0.0          0.0         -2.40000      0.00090      0.0          0.0          0.0          0.0
 60     0.00000      0.00000     -0.00000     -0.00000     40.22339     -0.12465      0.08435      0.01088     -0.00000      0.00000
 61     0.00000      0.00000     -0.00000     -0.00000     -3.27714      0.00242      0.00297      0.00694     -0.00000      0.00000
 62     0.00000      0.00000     -0.00000     -0.00000     57.14051      0.00157     -0.00097      0.00403     -0.00000      0.00000
 63    -0.00000     -0.00000      0.00000     -0.00000     23.60474      0.00297     -0.00184      0.00760      0.00000     -0.00000
 64    -0.00000     -0.00000      0.00000      0.00000    -26.42655      0.12513     -0.09599      0.34438      0.00000     -0.00000
 65     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 66     0.00000      0.00000     -0.00000      0.00000    725.87632     -0.10267     10.26171     -0.89367     -0.00000      0.00000
 67     0.00000      0.00000     -0.00000      0.00000    725.87632     -0.10267     10.26171     -0.89367     -0.00000      0.00000
 68     0.00000      0.00000     -0.00000      0.00000    725.87632     -0.10267     10.26171     -0.89367     -0.00000      0.00000
 69     0.00000      0.00000     -0.00000     -0.00000    498.90062     -0.06965      0.07807     -0.32318     -0.00000      0.00000
 70     0.00000      0.00000     -0.00000      0.00000    192.93114     -0.10016     10.75987     -0.30663     -0.00000      0.00000
 71     0.00000      0.00000     -0.00000      0.00000     88.30052      0.00757      0.00224     -0.41483     -0.00000      0.00000
 72    -0.00000     -0.00000      0.00000      0.00000      1.63974      0.00079      0.00013     -0.00054      0.00000     -0.00000
 73     0.00000      0.00000     -0.00000     -0.00000     53.73199     -0.05472      0.57373     -0.13963     -0.00000      0.00000
 74     0.00000      0.00000     -0.00000     -0.00000      2.16369     -0.00406      0.00487     -0.01188     -0.00000      0.00000
 75     0.00000      0.00000     -0.00000      0.00000    108.72573      0.00257      0.00132     -0.00547     -0.00000      0.00000
 76     0.00000      0.00000     -0.00000      0.00000    104.76690     -0.05429      0.04209     -0.17426     -0.00000      0.00000
 77     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 78    -0.00000     -0.00000      0.00000      0.00000     34.04457      0.06714     -0.57622     -0.26386      0.00000     -0.00000
 79     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 80     0.0          0.0          0.0          0.0          0.0          0.01800      0.0          0.0          0.0          0.0
 81     0.00000      0.00000     -0.00000     -0.00000    150.90639      0.05700      0.10213      0.05355      0.00000      0.00000
 82     0.00000      0.00000     -0.00000     -0.00000    102.89641      0.02037     -0.05347      0.01339      0.00000      0.00000
 83     0.00000      0.00000     -0.00000     -0.00000     -0.00000      0.02445      0.13700     -0.00000      0.00000      0.00000
 84     0.0          0.0          0.0          0.0          7.12000      0.00300      0.01860      0.04016      0.0          0.0
 85     0.0          0.0          0.0          0.0         -2.23498     -0.00118      0.0          0.0          0.0          0.0
 86     0.0          0.0          0.0          0.0        -43.36101      0.00773      0.0          0.0          0.0          0.0
 87     0.0          0.0          0.0          0.0          0.23604     -0.00008      0.0          0.0          0.0          0.0
 88     0.0          0.0          0.0          0.0         25.97173      0.00004      0.0          0.0          0.0          0.0
 89     0.0          0.0          0.0          0.0        -20.75990      0.00146      0.0          0.0          0.0          0.0
 90     0.0          0.0          0.0          0.0         48.00998     -0.00582      0.01860      0.04016      0.0          0.0
 91     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 92     0.00000      0.00000     -0.00000      0.00000    -39.18565     -0.01608      0.04414      0.02002     -0.00000      0.00000
 93     0.00000      0.00000     -0.00000      0.00000    -39.18565     -0.01608      0.04414      0.02002     -0.00000      0.00000
 94     0.00000      0.00000     -0.00000      0.00000    -39.18565     -0.01608      0.04414      0.02002     -0.00000      0.00000
 95    -0.00000     -0.00000      0.00000      0.00000     35.48804     -0.03208     -0.08186     -0.04292     -0.00000     -0.00000
 96     0.0          0.0          0.0          0.0        -81.74860      0.01316      0.12780      0.0          0.0          0.0
 97     0.00000      0.00000     -0.00000      0.00000     30.07444      0.00539      0.05390      0.06294     -0.00000      0.00000
 98     0.0          0.0          0.0          0.0         -1.00767      0.00144      0.0          0.0          0.0          0.0
 99     0.0          0.0          0.0          0.0         16.67434      0.00385      0.05270      0.0          0.0          0.0
100     0.0          0.0          0.0          0.0          5.31752      0.00014      0.00300      0.0          0.0          0.0
```

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              1          2          3          4           5           6           7           8          9          10
101   0.0        0.0        0.0        0.0         47.93835    0.00208     0.0         0.0        0.0        0.0
102   0.0        0.0        0.0        0.0         10.18540   -0.00173     0.0         0.0        0.0        0.0
103   0.0        0.0        0.0        0.0        -22.99953   -0.00254    -0.05570     0.0        0.0        0.0
104   0.0        0.0        0.0        0.0          0.0        0.0         0.0         0.0        0.0        0.0
105   0.0        0.0        0.0        0.0        377.22680    0.04358     0.0        -0.05382    0.0        0.0
106   0.0        0.0        0.0        0.0        377.22680    0.04358     0.0        -0.05382    0.0        0.0
107   0.0        0.0        0.0        0.0        377.22680    0.04358     0.0        -0.05382    0.0        0.0
108   0.0        0.0        0.0        0.0        351.04906    0.03843     0.0        -0.02270    0.0        0.0
109   0.0        0.0        0.0        0.0        -13.57688    0.00272     0.0         0.00899    0.0        0.0
110   0.0        0.0        0.0        0.0        131.90500    0.0         0.0        -0.04806    0.0        0.0
111   0.0        0.0        0.0        0.0          5.25479    0.00309     0.0        -0.00003    0.0        0.0
112   0.0        0.0        0.0        0.0        112.24985    0.00312     0.0        -0.00530    0.0        0.0
113   0.0        0.0        0.0        0.0        -14.84468   -0.00086     0.0        -0.00268    0.0        0.0
114   0.0        0.0        0.0        0.0        111.89572    0.00184     0.0        -0.00068    0.0        0.0
115   0.0        0.0        0.0        0.0         93.84454    0.00618     0.0        -0.00269    0.0        0.0
116   0.0        0.0        0.0        0.0         39.75462    0.00087     0.0        -0.04011    0.0        0.0
117   0.0        0.0        0.0        0.0          0.0        0.0         0.0         0.0        0.0        0.0
118   0.0        0.0        0.0        0.0       2143.39863    0.02302    -0.01087    -0.53737    0.0        0.0
119   0.0        0.0        0.0        0.0       2143.39863    0.02302     0.98913    -0.53737    0.0        0.0
120   0.0        0.0        0.0        0.0       2143.39863    0.02302     0.98913    -0.53737    0.0        0.0
121   0.0        0.0        0.0        0.0       1083.40371   -0.00641     0.0         0.10950    0.0        0.0
122   0.0        0.0        0.0        0.0       1097.67811    0.01923    -0.00537    -0.02128    0.0        0.0
123   0.0        0.0        0.0        0.0        214.43032    0.00552     0.01390    -0.61871    0.0        0.0
124   0.0        0.0        0.0        0.0          7.42848    0.00045     0.0        -0.00005    0.0        0.0
125   0.0        0.0        0.0        0.0        262.42292   -0.00461     0.01640     0.00828    0.0        0.0
126   0.0        0.0        0.0        0.0         -2.88093    0.00038     0.00300    -0.00146    0.0        0.0
127   0.0        0.0        0.0        0.0        134.73278   -0.00294     0.0        -0.00081    0.0        0.0
128   0.0        0.0        0.0        0.0       1117.98434    0.01338     0.0         0.00817    0.0        0.0
129   0.0        0.0        0.0        0.0        -37.68319    0.01020    -0.00550    -0.62559    0.0        0.0
130   0.0        0.0        0.0        0.0          0.0        0.0         0.0         0.0        0.0        0.0
131   0.0        0.0        0.0        0.0         82.33689    0.15516     0.0         0.39054    0.0        0.0
132   0.0        0.0        0.0        0.0         82.33689    0.15516     0.0         0.39054    0.0        0.0
133   0.0        0.0        0.0        0.0         82.33689    0.15516     0.0         0.39054    0.0        0.0
134   0.0        0.0        0.0        0.0         47.45713    0.05908     0.0         0.14624    0.0        0.0
135   0.0        0.0        0.0        0.0         26.67754    0.10011     0.0         0.02546    0.0        0.0
136   0.0        0.0        0.0        0.0         68.30000   -0.00075     0.0         0.22080    0.0        0.0
137   0.0        0.0        0.0        0.0         -0.09402    0.00001     0.0        -0.00022    0.0        0.0
138   0.0        0.0        0.0        0.0         59.86854    0.00321     0.0         0.00161    0.0        0.0
139   0.0        0.0        0.0        0.0          0.13521    0.00007     0.0         0.00013    0.0        0.0
140   0.0        0.0        0.0        0.0        -32.12763   -0.01057     0.0        -0.02760    0.0        0.0
141   0.0        0.0        0.0        0.0        -27.83001   -0.00909     0.0        -0.02343    0.0        0.0
142   0.0        0.0        0.0        0.0          8.20222   -0.00403     0.0         0.21884    0.0        0.0
143   0.0        0.0        0.0        0.0          0.0        0.0         0.0         0.0        0.0        0.0
144   0.0        0.0        0.0        0.0        803.29049    0.22314     0.0        -0.35998    0.0        0.0
145   0.0        0.0        0.0        0.0        803.29049    0.22314     0.0        -0.35998    0.0        0.0
146   0.0        0.0        0.0        0.0        803.29049    0.22314     0.0        -0.35998    0.0        0.0
147   0.0        0.0        0.0        0.0        634.68799   -0.44487     0.0        -1.24788    0.0        0.0
148   0.0        0.0        0.0        0.0        -29.88668    0.01844     0.0         0.04364    0.0        0.0
149   0.0        0.0        0.0        0.0        197.25593    0.64921     0.0         0.84392    0.0        0.0
150   0.0        0.0        0.0        0.0          1.23325    0.00036     0.0         0.00035    0.0        0.0
```

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                1              2              3             4             5            6            7            8            9            10
151       0.0            0.0            0.0           0.0          101.98903     0.10267      0.0          0.26018      0.0          0.0
152       0.0            0.0            0.0           0.0           -0.01854     0.00031      0.0          0.00078      0.0          0.0
153       0.0            0.0            0.0           0.0           29.97591     0.00660      0.0         -0.00044      0.0          0.0
154       0.0            0.0            0.0           0.0           55.89000     0.05985      0.0          0.14305      0.0          0.0
155       0.0            0.0            0.0           0.0           96.50015     0.54690      0.0          0.58408      0.0          0.0
156       0.0            0.0            0.0           0.0            0.0         0.0          0.0          0.0          0.0          0.0
157       0.52613        0.52613       -0.52613       0.41038      621.74910     0.76276     -0.25491    -24.53034     -0.00005      0.70692
158      -0.08077       -0.08077        0.08077      -0.14434     2951.42184     0.16763     10.91655    -47.68989      0.00001     -1.57281
159       1.07366        0.07366       -0.07366       0.05745      -82.56460     0.39251      0.46905    172.03289     -0.00001      0.09897
160       0.03157        0.03157       -0.03157       0.02462     1285.19389     0.21643     10.79266    -46.70869     -0.00000      0.04242
```

	11	12	13	14	15	16	17	18	19	20
1	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
2	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
3	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
4	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000
5	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
6	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
7	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
8	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
9	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
10	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
11	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000
12	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
13	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.00000	0.0	-1.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
15	1.00000	0.0	-1.00000	-1.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
16	1.00000	0.0	-1.00000	-1.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
17	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
18	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0,00000	0.00000	-0.00000	0.00000
19	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
20	0.00000	0.0	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000
21	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
22	-0.00000	0.0	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000
23	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000
24	0.00000	0.0	-1.00000	-0.00000	-0.00000	-0.00000	-0 00000	-0.00000	0.00000	-0.00000
25	0.00000	-1.00000	-0.00000	1.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
26	-1.00000	0.0	0.0	0.0	1.00000	1.00000	0.0	0.0	0.0	0.0
27	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	32.77740	1.11679	3.93763	0.02569
28	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	32.77740	0.11679	3.93763	0.02569
29	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	32.77740	0.11679	3.93763	0.02569
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31000	0.0
31	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	60.74177	0.21643	-26.70293	0.04762
32	0.00000	0.0	-0.00000	-0.00000	0.00000	0.0	-11.99671	0.40714	13.72675	-0.13043
33	0.00000	0.0	-0.00000	-0.00000	0.00000	0.0	-14.57545	0.49466	16.65736	0.10882
34	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.32665	0.00121	0.04566	0.00027
35	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	0.06555	0.00023	0.00788	0.00005
36	0.00000	0.0	-0.00000	-0.00000	0.00000	0.00000	-0.11212	0.00381	0.12829	0.00084
37	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.09502	0.00322	0.10872	0.00071
38	0.00000	0.0	-0.00000	-0.00000	-1.00000	-1.00000	-26.96437	1.90036	30.33057	-0.02192
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	59.32677	0.21139	9.48268	0.04651
41	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	59.32677	0.21139	9.48268	0.04651
42	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	59.32677	0.21139	9.48268	0.04651
43	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	8.19435	0.02920	0.98441	0.00642
44	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	59.32677	0.21139	9.48268	0.04651
45	0.00000	0.0	-0.00000	-0.00000	0.00000	0.00000	-42.18033	1.43150	131.80491	0.31493
46	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.49839	0.01691	0.57026	8.61168
47	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	2.90744	0.00618	0.24616	0.00136
48	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-0.03278	-0.00012	0.00216	-0.00003
49	-0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.04898	0.00166	0.05604	0.00037
50	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	-8.81024	-0.03139	-1.05840	-0.00691

```
            11          12           13           14           15           16           17           18           19           20
 51    0.00000     0.0         -0.00000     -0.00000      0.00000      0.00000    -45.55338      1.44236    132.12685      8.92528
 52    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 53    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.00000      0.00000
 54    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.00000      0.00000
 55    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.00000      0.00000
 56    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000     -0.00000      0.00000
 57    0.00000     0.0         -0.00000     -0.00000      0.00000      0.0          0.0          0.0          0.00000      0.0
 58    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 59    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 60   -0.00000     0.0          0.00000      0.00000     -0.00000      0.00000      0.0         -0.00000     -0.00000      0.0
 61    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.0          0.00000     -0.00000      0.0
 62   -0.00000     0.0          0.00000      0.00000      0.00000      0.00000      0.0         -0.00000     -0.00000      0.0
 63    0.00000     0.0         -0.00000     -0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000
 64    0.00000     0.0         -0.00000     -0.00000      0.00000      0.0          0.0          0.0          0.00000      0.0
 65    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 66   -0.00000     0.0          0.00000      0.00000     -0.00000     -0.00000      0.00000     -0.00000     -0.00000     -0.00000
 67   -0.00000     0.0          0.00000      0.00000     -0.00000     -0.00000      0.00000     -0.00000     -0.00000     -0.00000
 68   -0.00000     0.0          0.00000      0.00000     -0.00000     -0.00000      0.00000     -0.00000     -0.00000     -0.00000
 69   -0.00000     0.0          0.00000      0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000      0.0
 70   -0.00000     0.0          0.00000      0.00000      0.00000      0.00000      0.0         -0.00000     -0.00000     -0.00000
 71    0.00000     0.0         -0.00000     -0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
 72    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000      0.00000     -0.00000     -0.00000
 73   -0.00000     0.0          0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000      0.00000     -0.00000
 74   -0.00000     0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
 75   -0.00000     0.0          0.00000      0.00000      0.00000      0.00000      0.0         -0.00000     -0.00000     -0.00000
 76   -0.00000     0.0          0.00000      0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
 77    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 78    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000     -0.00000      0.00000
 79    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 80    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 81   -0.00000     0.0          0.00000      0.00000     -0.00000      0.0         -0.00000     -0.00000      0.00000     -0.00000
 82   -0.00000     0.0          0.00000      0.00000     -0.00000      0.0         -0.00000     -0.00000      0.00000     -0.00000
 83   -0.00000     0.0          0.00000      0.00000     -0.00000      0.0         -0.00000     -0.00000      0.00000     -0.00000
 84    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 85    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 86    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 87    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 88    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 89    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 90    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 91    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 92    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
 93    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
 94    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
 95    0.00000     0.0         -0.00000     -0.00000      0.00000      0.0          0.00000      0.00000     -0.00000      0.00000
 96    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 97    0.00000     0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
 98    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 99    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
100    0.0         0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

	11	12	13	14	15	16	17	18	19	20
101	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
102	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
103	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
104	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
105	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
106	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
107	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
108	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
109	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
110	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
111	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
112	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
113	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
114	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
115	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
116	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
117	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
118	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
119	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
120	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
121	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
122	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
123	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
124	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
125	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
126	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
127	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
128	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
129	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
130	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
131	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
132	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
133	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
134	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
135	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
136	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
137	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
138	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
139	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
140	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
141	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
142	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
143	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
144	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
145	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
146	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
147	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
148	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
149	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
150	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

```
              11          12          13          14          15          16          17          18          19          20
151    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157   -0.00000     0.0         0.00000     0.00000     0.00000     0.00000    32.77740     0.11679     3.93763     0.02569
158    1.00000     0.0        -1.00000    -1.00000     1.00000     0.00000    59.32677     0.21139     9.48268     0.04651
159    1.00000     0.0         0.00000     0.00000     0.00000     0.00000    60.74177     0.21643   -26.70293     0.04762
160   -0.00000     0.0         0.00000     0.00000     0.00000     0.00000    59.32677     0.21139     9.48268     0.04651
```

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           21          22          23          24          25          26          27          28          29          30
  1   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  2   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  3   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  4    0.00000    -0.00000    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
  5   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  6   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  7   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  8   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
  9   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 10   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 11    0.00000    -0.00000    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 12   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 13    0.0         0.0        0.0         0.0          0.0        0.0          0.0         0.0         0.0         0.0
 14   -0.00000     0.00000    0.0         0.0          0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 15   -0.00000     0.00000    0.0         0.0          0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 16   -0.00000     0.00000    0.0         0.0          0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 17   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 18   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 19   -0.00000     0.00000    0.0         0.0          0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 20    0.00000    -0.00000    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 21   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 22   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 23   -0.00000     0.00000    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 24    0.00000    -0.00000    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 25   -0.00000    -0.00000    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000     0.00000
 26    0.0         0.0        0.0         0.0          0.0        0.0          0.0         0.0         0.0         0.0
 27  -18.15277   -10.41760    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 28  -18.15277   -10.41760    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 29  -18.15277   -10.41760    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 30    0.0         5.22740 9  0.0         0.0          0.0        0.0          0.0         0.0         0.0         0.0
 31  -33.63998    38.83802    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000     0.00000
 32    6.89406   -25.10679    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 33    8.37596   -30.50358    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 34   -0.18088    -0.10652    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 35   -0.03631    -0.02084    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 36    0.06443    -0.23464    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 37    0.05460    -0.19885    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 38   15.48721   -55.48302    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 39    0.0         0.0        1.00000     1.00000      0.0       -1.00000      0.0         0.0         0.0         0.0
 40  -32.85633   -13.44575    0.0         0.0         -1.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 41  -32.85633   -13.44575    0.0         0.0         -1.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 42  -32.85633   -13.44375    0.0         0.0         -1.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 43   -4.53819     3.62346    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 44  -32.85633   -13.44575    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 45   24.23946   -88.27526    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 46    0.28641    -1.04303    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 47   -1.61252    -0.65522    0.0         0.0          0.00000    0.0          0.00000     0.00000    -0.00000    -0.00000
 48    0.01815     0.01042    0.0         0.0         -0.00000    0.0         -0.00000    -0.00000     0.00000    -0.00000
 49    0.02815     1.09749    0.0         0.0          0.00000    1.00000     -0.00000    -0.00000     0.00000     0.00000
 50    4.87928     2.80015    0.0         0.0         -1.00000    0.0          0.00000     0.00000    -0.00000     0.0
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                21          22          23          24          25          26          27          28          29          30
 51      26.12023   -88.67349    -1.00000    -1.00000    -0.00000     0.0        -0.00000    -0.00000     0.00000    -0.00000
 52       2.72682     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53      -0.00000    -0.00000     0.0         0.0        -0.00000     0.0         2.18694     2.18694    -1.18694    -1.39964
 54      -0.00000    -0.00000     0.0         0.0        -0.00000     0.0         2.18694     2.18694    -2.18694    -1.39964
 55      -0.00000    -0.00000     0.0         0.0        -0.00000     0.0         2.18694     2.18694    -2.18694    -2.39964
 56      -0.00000    -0.00000     0.0         0.0        -0.00000     0.0         1.39916     1.39916    -1.39916    -1.53546
 57       0.0         0.0         0.0         0.0        -0.00000     0.0        -0.16301    -0.16301     0.16301     0.10433
 58       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60       0.0        -0.00000     0.0         0.0         0.00000     0.0         0.03004     0.03004    -0.03004    -0.01923
 61       0.0        -0.00000     0.0         0.0        -0.00000     0.0         0.01916     0.01916    -0.01916    -0.01226
 62       0.0        -0.00000     0.0         0.0         0.00000     0.0         0.01113     0.01113    -0.01113    -0.00712
 63       0.0        -0.00000     0.0         0.0        -0.00000     0.0         0.02099     0.02099    -0.02099    -0.01344
 64       0.0         0.00000     0.0         0.0        -0.00000     0.0        -0.04920    -0.04920    -0.95080     0.03149
 65       0.0         0.0         0.0         0.0         0.0         0.0        -1.00000    -1.00000     0.0         1.00000
 66      -0.00000     0.00000     0.0         0.0         0.00000     0.0        -1.31798    -1.31798     1.31798     1.25150
 67      -0.00000     0.00000     0.0         0.0         0.00000     0.0        -1.31798    -1.31798     1.31798     1.25150
 68      -0.00000     0.00000     0.0         0.0         0.00000     0.0        -1.31798    -1.31798     1.31798     1.25150
 69       0.0         0.00000     0.0         0.0         0.00000     0.0        -0.89227    -0.83227     0.89227     0.97906
 70       0.0        -0.00000     0.0         0.0         0.00000     0.0        -0.84657    -0.84657     0.84657     0.54180
 71      -0.00000    -0.00000     0.0         0.0        -0.00000     0.0         0.00406     0.00406    -0.00406    -0.00260
 72       0.00000     0.00000     0.0         0.0        -0.00000     0.0        -0.00150    -0.00150     0.00150     0.00096
 73       0.00000    -0.00000     0.0         0.0         0.00000     0.0        -0.38550    -0.38550     0.38550     0.24672
 74      -0.00000    -0.00000     0.0         0.0         0.00000     0.0        -0.03280    -0.03280     0.03280     0.02099
 75       0.0        -0.00000     0.0         0.0         0.00000     0.0        -0.01509    -0.01509     0.01509     0.00966
 76       0.00000     0.00000     0.0         0.0         0.00000     0.0        -0.48113    -0.48113     0.48113     0.30792
 77       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78      -0.00000     0.00000     0.0         0.0        -0.00000     0.0         0.42096     0.42086    -0.42086    -0.26935
 79       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81       0.00000    -0.00000     0.0         0.0         0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 82       0.00000    -0.00000     0.0         0.0         0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 83       0.00000    -0.00000     0.0         0.0         0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 84       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 90       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92       0.00000     0.00000     0.0         0.0        -0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 93       0.00000     0.00000     0.0         0.0        -0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 94       0.00000     0.00000     0.0         0.0        -0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 95      -0.00000     0.00000     0.0         0.0        -0.00000     0.0        -0.00000    -0.00000     0.00000     0.00000
 96       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 97       0.00000     0.00000     0.0         0.0        -0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 98       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

	21	22	23	24	25	26	27	28	29	30
101	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
102	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
103	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
104	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
105	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
106	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
107	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
108	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
109	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
110	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
111	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
112	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
113	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
114	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
115	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
116	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
117	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
118	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
119	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
120	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
121	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
122	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
123	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
124	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
125	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
126	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
127	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
128	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
129	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
130	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
131	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
132	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
133	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
134	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
135	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
136	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
137	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
138	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
139	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
140	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
141	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
142	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
143	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
144	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
145	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
146	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
147	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
148	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
149	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○
150	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

```
             21          22         23       24        25        26       27         28         29         30
151        0.0         0.0         0.0      0.0       0.0       0.0      0.0        0.0        0.0        0.0
152        0.0         0.0         0.0      0.0       0.0       0.0      0.0        0.0        0.0        0.0
153        0.0         0.0         0.0      0.0       0.0       0.0      0.0        0.0        0.0        0.0
154        0.0         0.0         0.0      0.0       0.0       0.0      0.0        0.0        0.0        0.0
155        0.0         0.0         0.0      0.0       0.0       0.0      0.0        0.0        0.0        0.0
156        0.0         0.0         0.0      0.0       0.00000   0.0      2.18694    2.18694   -2.18694   -1.39964
157      -18.15277   -10.41760     0.0      0.0      -1.00000   0.0     -1.31798   -1.31798    1.31798    1.25150
158      -32.85633   -13.44575     0.0      0.0       0.00000   0.0     -0.16301   -0.16301    0.16301    0.10433
159      -33.63998    38.83802     1.00000  0.0       0.00000   0.0     -0.84657   -0.84657    0.84657    0.54180
160      -32.85633   -13.44575     0.0      0.0       0.00000   0.0
```

	31	32	33	34	35	36	37	38	39	40
1	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
2	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
3	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
4	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
5	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
6	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000
7	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000
8	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
9	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000
10	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000
11	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000
12	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
15	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
16	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
17	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
18	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
19	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
20	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000
21	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
22	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
23	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
24	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000
25	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
28	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
29	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
32	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
33	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
34	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
35	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
36	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
37	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
38	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
41	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
42	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
43	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
44	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
45	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
46	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
47	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
48	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000
49	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000
50	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000

	31	32	33	34	35	36	37	38	39	40
51	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.00219	-3.99634	1.82061	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
54	0.00219	-3.99634	1.82061	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
55	0.00219	-3.99634	1.82061	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
56	0.00140	-2.58426	0.38227	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
57	-0.00016	0.29789	1.64429	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.00100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.00003	1.66230	0.18242	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
61	0.00002	0.04767	0.02353	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000
62	0.00001	0.61567	0.06756	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
63	0.00002	1.16164	0.12748	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
64	0.00095	-1.70997	-0.20595	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	-0.00132	2.26640	-54.01022	1.00000	1.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
67	-0.00132	2.26640	-54.01022	1.00000	1.00000	-1.00000	-0.00000	0.00000	0.00000	-0.00000
68	-0.00132	2.26640	-54.01022	1.00000	1.00000	-1.00000	-1.00000	0.00000	0.00000	-0.00000
69	-0.00089	1.63050	-37.74261	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
70	-0.00085	1.54698	-16.60476	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
71	0.00000	0.22484	0.02467	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000	-0.00000
72	-0.00000	-0.08305	-0.00911	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000
73	-0.00039	0.99293	-0.29448	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
74	-0.00003	0.05995	-0.02731	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
75	-0.00002	-0.83504	-0.09164	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000
76	-0.00048	1.51919	-7.97054	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000
77	0.0	0.0	0.0	0.0	0.0	-1.00000	0.0	0.0	0.0	0.0
78	0.00042	-0.91109	0.33735	-1.00000	-1.00000	-0.00000	1.00000	-0.00000	-0.00000	0.00000
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	1.00000	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	1.00000	-1.00000
81	0.00000	0.0	-0.00000	0.00000	0.00000	0.00000	-0.00000	3.33924	3.33924	-3.33924
82	0.00000	0.0	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.75357	0.75357	-0.75357
83	0.00000	0.0	-0.00000	0.00000	0.00000	0.00000	-0.00000	2.05278	2.05278	-2.05278
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00209	0.00209	-0.00209
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47365	0.47365	-0.47365
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.00445	-0.00445	0.00445
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00394	0.00394	-0.00394
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13450	0.13450	-0.13450
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.46711	-0.46711	-0.53289
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00000	-1.00000	0.0
92	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-1.06274	-1.06274	1.06274
93	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-1.06274	-1.06274	1.06274
94	0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-1.06274	-1.06274	1.06274
95	-0.00000	0.0	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-2.67637	-2.67637	2.67637
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.80900	1.80900	-1.80900
97	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.01887	-0.01887	0.01887
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.00248	-0.00248	0.00248
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20873	0.20873	-0.20873
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.03470	-0.03470	0.03470

```
               31          32          33          34          35          36          37          38          39          40
101  0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.07514    -0.07514     0.07514
102  0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.24870    -0.24870     0.24870
103  0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.17651    -0.17651     0.17651
104  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
105  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
106  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
118  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

```
             31          32          33          34          35          36          37          38          39          40
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     0.00219    -3.99634     1.82061     0.00000     0.00000     0.00000    -0.00000     1.00000     1.00000    -1.00000
158    -0.00132     2.26640   -54.01022     1.00000     1.00000    -1.00000    -0.00000    -1.06274    -1.06274     1.06274
159    -0.00016     C.29789     1.64429    -0.00000    -0.00000     0.00000     0.00000     3.05278     2.05278    -2.05278
160    -0.00085     1.54698   -16.60476     1.00000    -0.00000     0.00000     0.00000     1.80900     1.80900    -1.80900
```

	41	42	43	44	45	46	47	48	49	50
1	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
2	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
3	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
4	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
5	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
6	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
7	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
8	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
9	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
10	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
11	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
12	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
15	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
16	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
17	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
18	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
19	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
20	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
21	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
22	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
23	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
24	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.00000	0.00000
25	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
28	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
29	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
32	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
33	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
34	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
35	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
36	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
37	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
38	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
41	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
42	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
43	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
44	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
45	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
46	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
47	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
48	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
49	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
50	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0

	41	42	43	44	45	46	47	48	43	50
51	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
54	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
55	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
56	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
57	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
61	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
62	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
63	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
64	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
67	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
68	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
69	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
70	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
71	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
72	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
73	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
74	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
75	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
76	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	-1.33333	0.00120	-0.55305	-85.80596	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
82	-0.33333	0.00030	-0.56134	-22.77376	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
83	0.00000	-0.00000	0.00000	-63.05810	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.00090	0.01088	0.03399	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	-0.00029	-0.00089	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.00287	0.00698	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.02052	0.06414	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.70041	2.18905	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.00090	0.00829	0.02591	0.0	0.0	0.0	0.0	0.0	0.0
91	-1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	1.06865	0.00313	0.40016	82.69203	1.00000	1.00000	-0.00000	0.0	0.00000	0.00000
93	1.06855	0.00313	0.40016	82.69203	1.00000	1.00000	-1.00000	0.0	0.00000	0.00000
94	1.06865	0.00313	0.40016	82.69203	1.00000	1.00000	-1.00000	-1.00000	0.00000	0.00000
95	1.06865	-0.00096	0.44326	82.69892	0.00000	0.00000	-0.00000	0.0	0.0	0.0
96	0.0	0.0	0.0	0.12784	0.0	0.0	0.0	0.0	0.0	0.0
97	-0.00000	0.00000	-0.09826	-0.30711	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
98	0.0	0.00409	-0.01292	-0.04038	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	-0.06803	-0.21276	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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                41          42          43          44          45          46          47          48          49          50
101      0.0         0.0        -0.39131    -1.22300     0.0         0.0         0.0         0.0         0.0         0.0
102      0.0         0.0         0.86675     0.0         0.0         0.0         0.0         0.0         0.0         0.0
103      0.0         0.00409     0.05516     0.17238     0.0         0.0         0.0         0.0         0.0         0.0
104      0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0
105      0.0         0.0         0.0         0.0        -1.00000    -1.00000     0.0         1.00000     0.0         0.0
106      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.11986     1.11986
107      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.11986     1.11986
108      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.11986     1.11986
109      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.47224     0.47224
110      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.18702    -0.18702
111      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.00071     0.00071
113      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.11034     0.11034
114      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.05572     0.05572
115      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.01412     0.01412
116      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.05599     0.05599
117      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.16535    -0.16535
118      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000    -1.00000
119      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.69617    -1.69617
120      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.69617    -1.69617
121      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.69617    -1.69617
122      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -2.27834    -2.27834
123      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.44286     0.44286
124      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.00369    -0.00369
125      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.00107     0.00107
126      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.17227    -0.17227
127      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.03034     0.03034
128      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.01686     0.01686
129      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.17006    -0.17006
130      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.13931     0.13931
131      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

```
              41          42          43          44          45          46          47          48          49          50
151   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157   0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000     0.0         1.11986     1.11986
158   1.06865     0.00313     0.40016    82.69203     1.00000     1.00000    -1.00000     0.0        -1.69617    -1.69617
159   0.00000    -0.00000     0.00000   -63.05810    -0.00000    -0.00000     0.00000     0.0         0.81298    -0.18702
160  -0.00000     0.00000     0.00000     0.12784     1.00000    -0.00000     0.00000     0.0         0.44286     0.44286
```

	51	52	53	54	55	56	57	58	59	60
1	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
2	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
3	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
4	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
5	0.00000	0.00000	0.0	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
6	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
7	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
8	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
9	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
10	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
11	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
12	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
15	0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
16	0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
17	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
18	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
19	0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
20	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
22	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
23	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
24	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
25	-0.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
28	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
29	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
32	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
33	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
34	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
35	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
36	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
37	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
38	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
41	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
42	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
43	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
44	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
45	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
46	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
47	0.00000	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
48	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
49	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000
50	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000

	51	52	53	54	55	56	57	58	59	60
51	-0.00000	0.00000	0.0	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
54	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
55	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
56	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	0.0
57	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
61	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
62	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
63	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
64	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
67	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
68	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
69	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
70	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
71	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
72	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000
73	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
74	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
75	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
76	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	-0.00000	0.00000	-0.00000	0.00000	-1.33333	-0.00000	0.00000	0.0	0.00000	0.00000
82	-0.00000	0.00000	-0.00000	0.00000	-0.33333	-0.00000	0.00000	0.0	0.00000	0.00000
83	-0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	-1.00000	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	-0.00000	-0.00000	-0.00000	-0.00000	0.06865	0.00000	-0.00000	0.0	-0.00000	-0.00000
93	-0.00000	-0.00000	-0.00000	-0.00000	0.06865	0.00000	-0.00000	0.0	-0.00000	-0.00000
94	-0.00000	-0.00000	-0.00000	-0.00000	0.06865	0.00000	-0.00000	0.0	-0.00000	-0.00000
95	0.00000	-0.00000	0.00000	-0.00000	1.06865	0.00000	-0.00000	0.0	-0.00000	-0.00000
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000
98	0.0	0.0	0.0	0.0	-1.00000	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	51	52	53	54	55	56	57	58	59	60
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	-1.00000	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	-0.11986	-0.45320	0.47978	-4.07452	0.0	0.0	0.0	0.0	0.0	0.0
106	-1.11986	-0.45320	0.47978	-4.07452	0.0	0.0	0.0	0.0	0.0	0.0
107	-1.11986	-1.45320	0.47978	-4.07452	0.0	0.0	0.0	0.0	0.0	0.0
108	-0.47224	-0.59560	0.45052	-4.27031	0.0	0.0	0.0	0.0	0.0	0.0
109	0.18702	0.07568	-0.08012	-0.87724	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	-0.00071	-0.00029	0.00951	-0.13171	0.0	0.0	0.0	0.0	0.0	0.0
112	-0.11024	-0.04465	-0.12025	1.94593	0.0	0.0	0.0	0.0	0.0	0.0
113	-0.03572	-0.02255	0.02055	-0.15369	0.0	0.0	0.0	0.0	0.0	0.0
114	-0.01412	-0.00571	0.19014	-2.63420	0.0	0.0	0.0	0.0	0.0	0.0
115	-0.05599	-0.02266	0.75398	-10.44573	0.0	0.0	0.0	0.0	0.0	0.0
116	-0.83465	0.06692	0.10938	-1.92596	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	1.69617	2.87892	1.24756	-149.37952	0.0	1.00000	0.0	0.0	0.0	0.0
119	1.69617	2.87892	1.24756	-149.37952	0.0	1.00000	-1.00000	0.0	0.0	0.0
120	1.69617	2.87892	1.24756	-149.37952	0.0	1.00000	-1.00000	-1.00000	0.0	0.0
121	2.27834	3.11452	1.33097	-24.07897	0.0	0.0	0.0	0.0	0.0	0.0
122	-0.44286	-0.17922	0.18973	-129.46331	0.0	0.0	0.0	0.0	0.0	0.0
123	0.00369	0.00149	-0.04974	0.68905	0.0	0.0	0.0	0.0	0.0	0.0
124	-0.00107	-0.00043	0.01444	-0.20007	0.0	0.0	0.0	0.0	0.0	0.0
125	0.17227	0.06972	0.22485	-3.56340	0.0	0.0	0.0	0.0	0.0	0.0
126	-0.03034	-0.01228	0.01300	-0.11038	0.0	0.0	0.0	0.0	0.0	0.0
127	-0.01686	-0.00682	0.22700	-3.14489	0.0	0.0	0.0	0.0	0.0	0.0
128	0.17006	0.06882	-0.07286	-113.63324	1.00000	0.0	0.0	0.0	0.0	0.0
129	-0.13931	-0.05638	-0.27314	4.16276	0.0	0.0	-1.00000	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	-1.00000	0.0	1.00000	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76874	1.76874
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76874	1.76874
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76874	1.76874
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66230	0.66230
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11530	0.11530
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.00100	-0.00100
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00727	0.00727
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00060	0.00060
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.12499	-0.12499
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.10612	-0.10612
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.00887	-0.00887
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00000	-1.00000
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.12932	-5.12932
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.12932	-5.12932
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.12932	-5.12932
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.65162	-5.65162
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19764	0.19764
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32310	0.32310
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00156	0.00156

```
                51          52          53          54          55          56          57          58          59          60
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.17835     1.17835
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.00354     0.00354
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.00199    -0.00199
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.64789     0.64789
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.85369    -0.85369
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157    -1.11986    -0.45320     0.47978    -4.07452     0.00000    -0.00000     0.00000     0.0         1.76874     1.76874
158     1.69617     2.87892     1.24756  -149.37952     0.06865     1.00000    -1.00000     0.0        -0.00000    -0.00000
159     0.18702     0.07568    -0.08012    -0.87724     0.00000    -0.00000     0.00000     0.0         1.11530     0.11530
160    -0.44286    -0.17922     0.18973  -129.46331    -0.00000    -0.00000     0.00000     0.0         0.19764     0.19764
```

	61	62	63	64	65	66	67	68	69	70
1	-0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
2	-0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
3	-0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
4	0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
5	0.0	0.00000	0.0	0.00000	0.00000	0.00000	0.0	0.0	-0.00000	0.0
6	0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
7	0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
8	0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
9	0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
10	0.00000	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
11	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
12	0.0	0.00000	0.0	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	-0.00000	0.0
15	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	-0.00000	0.0
16	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	-0.00000	0.0
17	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
18	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	-0.00000	0.0
19	0.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
20	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
21	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
22	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
23	-0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
24	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
25	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	-0.00000	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
28	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
29	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
32	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
33	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
34	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
35	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
36	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
37	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
38	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
41	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
42	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
43	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
44	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
45	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
46	-0.00000	-0.00000	0.00000	0.0	-0.00000	0.00000	0.0	0.0	0.00000	0.0
47	0.00000	0.00000	-0.00000	0.0	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
48	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
49	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
50	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0

	61	62	63	64	65	66	67	68	69	70
51	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
54	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
55	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
56	0.0	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
57	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
61	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
62	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
63	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
64	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
67	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
68	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
69	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
70	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
71	0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
72	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
73	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
74	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
75	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
76	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.00000	0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.0	-0.00000	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	-0.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
82	-0.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
83	-0.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.0	0.0	0.00000	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
93	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
94	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
95	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000	0.0	0.0	-0.00000	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.0	0.00000	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
              61          62          63          64          65          66          67          68          69          70
101   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
102   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
103   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
104   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
105   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
106   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
118   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131  -0.76874    -0.70369     0.00018     1.50519    19.25734     0.20010     0.0         0.0         0.0         0.0
132  -1.76874    -0.70369     0.00018     1.50519    19.25734     0.20010     0.0         0.0         0.0         0.0
133  -1.76874    -1.70369     0.00018     1.50519    19.25734     0.20010     0.0         0.0         0.0         0.0
134  -0.66230    -0.66135     0.00007     1.26443    17.83424     0.07493     0.0         0.0         0.0         0.0
135  -0.11530    -0.04587     0.00001     0.09812     1.25539    -0.02434     0.0         0.0         0.0         0.0
136   0.0         0.0         0.0         0.0         0.0         0.12040     0.0         0.0         0.0         0.0
137   0.00100     0.00040     0.00010     0.01608     0.01891    -0.00011     0.0         0.0         0.0         0.0
138  -0.00727    -0.00289     0.00000    -0.11690    -0.13746    -0.02271     0.0         0.0         0.0         0.0
139  -0.00060    -0.00024     0.00000    -0.00965    -0.01135     0.00049     0.0         0.0         0.0         0.0
140   0.12499     0.04973    -0.00001     2.01006     2.36354    -0.01414     0.0         0.0         0.0         0.0
141   0.10612     0.04222    -0.00001     1.70665     2.00678    -0.01201     0.0         0.0         0.0         0.0
142  -0.99113     0.00353     0.00010     0.14263     0.16772     0.14951     0.0         0.0         0.0         0.0
143   0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144   5.12932     4.98801    -0.00051    -2.43580  -151.65017    -1.31387     1.00000     1.00000     0.0         0.0
145   5.12932     4.98801    -0.00051    -2.43580  -151.65017    -1.31387     1.00000     1.00000    -1.00000     0.0
146   5.12932     4.98801    -0.00051    -2.43580  -151.65017    -1.31387     1.00000     1.00000    -1.00000    -1.00000
147   5.65162     5.19581    -0.00057     2.61715  -156.52553    -0.63937     0.0         0.0         0.0         0.0
148  -0.19764    -0.07863     0.00002     0.16819    11.01470    -0.94958     0.0         0.0         0.0         0.0
149  -0.32310    -0.12855     0.00003    -5.19600    -6.10976     0.27400     0.0         0.0         0.0         0.0
150  -0.00156    -0.00062     0.00000    -0.02515    -0.02957     0.00018     0.0         0.0         0.0         0.0
```

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              61          62          63          64          65          66          67          68          69          70
151     -1.17835    -0.46881     0.00012    -2.68730     6.33580     0.18081    0.0         0.0         0.0         0.0
152     -0.00354    -0.00141     0.00000     0.00301     0.03851     0.00149    0.0         0.0         0.0         0.0
153      0.00199     0.00079    -0.00000     0.03202     0.03765    -0.00023    0.0         0.0         0.0         0.0
154     -0.64789    -0.25776     0.00006     0.55135    -3.25514     0.07330    0.0         0.0         0.0         0.0
155      0.85369     0.33964    -0.00009    -2.53385   -12.47513     0.09427    0.0         0.0        -1.00000     0.0
156      0.0         0.0         0.0         0.0         0.0         0.0       -1.00000    -1.00000     0.0         1.00000
157     -1.76874    -0.70369     0.00018     1.50519    19.25734     0.20010    0.0         0.0        -0.00000     0.0
158      0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000    0.0         0.0         0.00000     0.0
159     -0.11530    -0.04587     0.00001     0.09812     1.25539    -0.02434    0.0         0.0        -0.00000     0.0
160     -0.19764    -0.07863     0.00002     0.16819    11.01470    -0.94958    1.00000     0.0        -0.00000     0.0
13:47:50  T=21.076  RC=0
```

Analysis of Reduced-form Coefficients:

Since many of the endogenous variables are of secondary interest, and since a number of the predetermined variables are not policy instruments, we shall confine our attention to the effects of some policy instruments on the most important economic variables, namely, GNP, BP, and FB for each of the two periods.

Although the primary impact of changes in the policy instruments are felt in the country in which the action is taken, we expect that the policy changes do have some effects in the other countries of the Andean Common Market. As Tables 6-1 though 6-4 [1] reveal the primary impact of changes in the policy instruments are felt in the country in which the action is taken. The policy changes do have moderate effects in the other members of the Andean Common Market.

The impacts of the policy instruments G or Ig and RM (reserve money) of year t on endogenous variable including target variables (GNP, BP and FB), total investment and total GNP in years t and t + 1 are presented in Tables 6-1 through 6-4. As is clear from these tables in certain cases the impact of changes in the policy instruments are felt in a single time period. In other words in some cases the lagged effects of the policy changes are almost zero.

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[1] These tables are obtained from the complete reduced form solution to the model presented in the preceding pages.

An increase in government expenditure increases the level of domestic income which will tend to increase import and create a trade deficit which may lead to a balance of payments deficit. As Table 6-1 indicates an increase of government spending (G or Ig) in year t in Bolivia of 1.00 Bolivian pesos raises GNP of Bolivia by .52613 and causes trade deficit. An increase in government spending of one member is expected to have some favourable effect on income and balance of payments of other members. However, as Table 6-1 indicates the expansionary fiscal policy in Ecuador and Peru has zero and negative impact on GNP of Bolivia. An increase of reserve money in Bolivia of 1 million Bolivian pesos at 1963 prices raises GNP of Bolivia by .70692.

In the case of monetary policy instrument (RM) it should be clear from the following tables that its spreading effects on the other countries is less effective than that of an increase of government spending. It may be that the short-term nature of our model is responsible for some of the negative though insignificant impact multipliers. The change in government expenditure in Ecuador has some spreading effect on GNP of Bolivia with a time lag of at least one year.

According to the reduced form solution of the model, with the exception of Venezuela the change in the interest rate of any member has almost the same degree of influence over the total investment in the region. In other words the coefficients have the same sign and the magnitude is similar.

An increase in the government expenditure of Chile of 1.00 pesos would increase the GNP of Chile in the current year (year t) by .02569

TABLE 6-1

Impact Multipliers

Country and variable affected	Country in which action is taken											
	Bolivia		Chile		Colombia		Ecuador		Peru		Venezuela	
Bolivia	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t
GNP_t	.52613	.70692	(+)	(-)	(+)	(-)	0	(+)	(-)	(+)	(+)	(-)
FB_t	-1.00	0	0	0	0	0	0	0	0	0	0	0
BP_t	-.13715	1.15935	(-)	(-)	(+)	(-)	0	(+)	0	(+)	0	(-)
GNP_{t+1}	-.08077	-1.57281	(+)	(-)	(-)	(+)	(+)	(-)	(-)	(+)	(+)	(-)
FB_{t+1}	.00278	0	1.00	0	0	0	0	0	0	0	0	0
BP_{t+1}	.03921	-3.4914	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(+)	(+)	(-)
$TGNP_t$	.52613	.70692	(+)	(-)	2.18694	(-)	1.00	(+)	1.11986	.47978	1.76864	1.50519
$TGNP_{t+1}$	-.08077	-1.57281	1.00	(-)	-1.31798	2.26640	(-)	.40016	(-)	1.24756	(-)	(+)
TI_t	1.07366	.09897	(+)	-33.63998	-.16301	.29789	2.05278	(+)	.81298	-.08012	1.11530	.09812
TI_{t+1}	.03157	.04242	(+)	-32.85633	-.84657	1.54698	1.8090	(+)	.44286	.18973	.19764	.16819

pesos and that of the next year (year t+1)) by .04651 pesos (Table 6-2). As Tables 6-2 to 6-4 indicate the degree of sensitivity to the changes in G_t or I_{gt} and RM_t varies considerably from one member to another member of the Andean Group. The differences are rather inconsistant. For example the change in G_t or I_{gt} and RM_t in Bolivia has positive effect on Chilean GNP both in time period t and $t+1$, while negative effect on GNP in Colombia in time period t. The intercountry policy multipliers are in some cases even zero. Note that policies in Bolivia, Chile, Colombia and Venezuela have no effect on Ecuador and Peru (Table 6-3). Policies of all members of the Andean Common Market have absolutely no effect on Venezuela (Table 6-4). This result may be due to the fact that Venezuela joined Andean Common Market in 1973 and our study ends in 1976. The short-term nature of our model then is responsible for this outcome.

An increase of government spending in Colombia of 1.00 pesos raises GNP of Colombia in year t by 2.18694. A one percent increase in interest rate reduces the GNP in year t by 3.99 percent. The spreading effect of policy changes in the Andean Common Market on basic macroeconomic variables of Ecuador, Peru and Venezuela are almost zero (Tables 6-3 and 6-4). The increase of government spending in Peru of 1.00 sole raises GNP of Peru in year t by 1.11986 whereas the effect of reserve money is .47978 and the influence of change in interest rate is negative and negligible. In Venezuela the effect on GNP in year t of 1.00 Bolivares increase in government spending and reserve money are 1.76874 and 1.50519 respectively.

TABLE 6-2

Impact Multipliers

Country and variable affected	Country in which action is taken									
	Bolivia		Chile		Colombia		Ecuador		Peru		Venezuela	
	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t
Chile												
GNP_t	(+)	(+)	.02569	(-)	(+)	(-)	(-)	(+)	(-)	(+)	(-)	(-)
FB_t	0	0	-.02192	0	0	0	0	0	0	0	0	0
BP_t	(-)	(-)	.00071	(+)	(-)	(-)	(-)	(+)	(+)	(+)	(+)	(+)
GNP_{t+1}	(+)	(+)	.04651	(-)	(+)	(-)	(-)	(+)	(-)	(+)	(-)	(-)
FB_{t+1}	0	0	0	2.72682	0	0	0	0	0	0	0	0
BP_{t+1}	(-)	(-)	8.92523	(+)	(-)	(-)	(-)	(+)	(+)	0	(+)	(+)
Colombia												
GNP_t	(-)	(-)	(+)	(-)	2.18694	1.82061	(-)	(+)	(-)	(+)	(-)	(+)
FB_t	0	0	0	0	-1.00	0	0	0	0	0	0	0
BP_t	(-)	(-)	0	0	-.0492	-.20595	(-)	(+)	(-)	(+)	(-)	(+)
GNP_{t+1}	(+)	(+)	(-)	(-)	(-)	(-)	(+)	(-)	0	(-)	(+)	(-)
FB_{t+1}	(-)	(-)	(+)	(-)	.42086	.33735	(-)	(+)	0	0	(-)	(+)
BP_{t+1}	0	0	0	0	0	0	0	0	0	(+)	0	0

TABLE 6-3

Impact Multipliers

Country and variable affected	Country in which action is taken											
	Bolivia		Chile		Colombia		Ecuador		Peru		Venezuela	
Ecuador	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t
GNP_t	0	0	0	0	0	0	1.00	0	0	0	0	0
FB_t	0	0	0	0	0	0	-1.00	0	0	0	0	0
BP_t	0	0	0	0	0	0	-.46711	.00829	0	0	0	0
GNP_{t+1}	(+)	(+)	(-)	(+)	(+)	(-)	(-)	.40016	(+)	(-)	(-)	(+)
FB_{t+1}	0	0	0	0	0	0	0	0	0	0	0	0
BP_{t+1}	0	0	0	0	0	0	-.17651	.05516	0	0	0	0
Peru												
GNP_t	0	0	0	0	0	0	0	0	1.11986	.47978	0	0
FB_t	0	0	0	0	0	0	0	0	-1.00	0	0	0
BP_t	0	0	0	0	0	0	0	0	-.16535	.10938	0	0
GNP_{t+1}	0	0	0	0	0	0	0	0	(-)	1.24756	0	0
FB_{t+1}	0	0	0	0	0	0	0	0	0	0	0	0
BP_{t+1}	0	0	0	0	0	0	0	0	.13931	-.27314	0	0

TABLE 6-4

Impact Multipliers

Country and variable affected	country in which action is taken											
	Bolivia		Chile		Colombia		Ecuador		Peru		Venezuela	
Venezuela	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t	G_t or I_{gt}	RM_t
GNP_t	0	0	0	0	0	0	0	0	0	0	1.76874	1.50519
FB_t	0	0	0	0	0	0	0	0	0	0	-1.00	0
BP_t	0	0	0	0	0	0	0	0	0	0	-.00887	.14263
GNP_{t+1}	0	0	0	0	0	0	0	0	0	0	(-)	(-)
FB_{t+1}	0	0	0	0	0	0	0	0	0	0	0	0
BP_{t+1}	0	0	0	0	0	0	0	0	0	0	-.85369	-2.53385

The reduced form coefficients presented in Tables 6-1 through 6-4 indicate that the primary impacts, as well as the spreading effects on other members, of changes in the policy instruments (Ig,G, and RM) on balance of payments are mixed. An increase in government spending of 1.00 Bolivares in Venezuela deteriorates its balance of payments by .00887 and improves Bolivian balance of payments in year t+1 and Chilean balance of payments in year t. In other words an increase in government spending in Venezuela raises its income and imports, hence deteriorates its balance of payments ceteris paribus. The rise in income in Venezuela raises exports and hence income of other members specially Bolivia and Chile[2]. As the matrix of reduced-form coefficients reveals the change in real rate of interest in each member has no substantial effect on the private investment in the other members of the Andean Group. The findings indicate that changes in interest rate in one country would not influence investment activities in another member. Our findings are supported by the fact that there is no evidence that a member country can borrow easily from another member when that member has lower interest rates.

Effects of Membership in ANCOM (Cu):

The effect of Cu (membership in the Andean Common Market) on the macroeconomic variables (GDP,GNP,Yd,C,Ip, $\sum Ex$, $\sum Ei$,$\sum NX$, $\sum Ni$,CR and MS) are summarized in Table 6-5. As this table indicates the formation of Andean Group has significantly affected GDP, GNP and Yd of Chile though Chile has withdrawn from the union in 1975. Membership in the ANCOM has the least effect in Ecuador. In Ecuador investment and extra-regional exports and therefore trade balance have been affected by Cu positively though not significantly. According to Table 6-5 the influence of membership in the Andean Group on most of variables in Bolivia is negative though insignificant. If we consider time lag, the effect of Cu on GNP of Colombia is positive and significant. The same thing applies to aggregate private investment in Colombia. The influence of Cu on investment and GNP of Venezuela has been positive but insignificant. Membership in the Andean Group has increased extra-regional exports of Bolivia, Chile, Ecuador, Peru and Venezuela while reducing those of Colombia. With the exception of Chile and Peru, this influence has been insignificant. Intra-regional imports of Peru have increased significantly according to Table 6-5. Imports of Chile, Colombia and Venezuela from other member countries have increased but not significantly. As Table 6-5 indicates membership in the Andean Common Market has not influenced MS and CR significantly though because of CAF (Andean Development Corporation) we expect positive and significant relation between availability of credit in each member and Cu. According to this table ANCOM has increased total exports of Chile more than its imports such that the net effect of Cu on BP is positive and significant. For Colombia this influence is negative but insignificant. For Peru the net effect of Cu on trade balance has been negative (Imports both intra and extra-regional have increased much more than exports). Cu has increased extra-regional exports as well as intra-regional imports of Venezuela while reducing its intra-regional exports and extra-regional imports resulting in a net

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[2] For similar spreading effects in case of other members as well as other spreading effects see Tables 6-1 through 6-4 .

TABLE 6-5

The Effect of Cu (Membership in the Union)

Variable affected	country Bolivia	Chile	Colombia	Ecuador	Peru	Venezuela
GDP	(I$\overset{-}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g.)	(In$\overset{-}{\text{s}}$.)*	0	(I$\overset{-}{\text{n}}$s.)***	(In$\overset{+}{\text{s}}$.)
GNP	(I$\overset{-}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g.)	(In$\overset{-}{\text{s}}$.)*	0	(s$\overset{+}{\text{i}}$g.)***	(In$\overset{+}{\text{s}}$.)
Yd	(I$\overset{-}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g.)	(In$\overset{-}{\text{s}}$.)*	(In$\overset{+}{\text{s}}$.)	(s$\overset{+}{\text{i}}$g.)***	(In$\overset{+}{\text{s}}$.)
C	(I$\overset{-}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g.)	(In$\overset{-}{\text{s}}$.)	(In$\overset{-}{\text{s}}$.)	0	(In$\overset{+}{\text{s}}$.)
I_p	(In$\overset{-}{\text{s}}$.)	(si$\overset{-}{\text{g}}$.)*	(In$\overset{+}{\text{s}}$.)**	(In$\overset{+}{\text{s}}$.)	(In$\overset{-}{\text{s}}$.)***	(In$\overset{-}{\text{s}}$.)
$\sum$EX	(I$\overset{+}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g)	(In$\overset{-}{\text{s}}$.)	(I$\overset{+}{\text{n}}$s.)	(I$\overset{+}{\text{n}}$s.)***	(I$\overset{+}{\text{n}}$s.)
$\sum$EI	(In$\overset{-}{\text{s}}$.)	(s$\overset{+}{\text{i}}$g)	0	0	0	(In$\overset{-}{\text{s}}$.)
$\sum$NX	(In$\overset{-}{\text{s}}$.)	(In$\overset{+}{\text{s}}$.)	(In$\overset{+}{\text{s}}$.)	0	(In$\overset{+}{\text{s}}$.)***	(In$\overset{-}{\text{s}}$.)
$\sum$NI	(In$\overset{-}{\text{s}}$.)	(I$\overset{+}{\text{n}}$s.)	(I$\overset{+}{\text{n}}$s.)	0	(I$\overset{+}{\text{n}}$s.)***	(I$\overset{+}{\text{n}}$s.)
CR	(In$\overset{+}{\text{s}}$.)	(In$\overset{+}{\text{s}}$.)	(I$\overset{-}{\text{n}}$s.)	0	0.	(I$\overset{-}{\text{n}}$s.)
MS	(I$\overset{+}{\text{n}}$s.)	(In$\overset{+}{\text{s}}$.)	(I$\overset{-}{\text{n}}$s.)	0	0	(I$\overset{-}{\text{n}}$s.)
BP	(I$\overset{-}{\text{n}}$s.)	(s$\overset{+}{\text{i}}$g.)	(I$\overset{-}{\text{n}}$s.)	(I$\overset{+}{\text{n}}$s.)	(I$\overset{-}{\text{n}}$s.)***	(I$\overset{+}{\text{n}}$s.)

Sig. Indicates significant
Ins. Indicates insignificant
* time lag makes it positive and significant
** time lag makes it significant
*** considering time lag, otherwise zero.
This table is based on the reduced foar coefficients

positive effect on trade balance.

In total the influences of Cu on the economies of member countries have been different. Although the effects of Cu on GNP and Ip of members, with one or two exceptions, have been positive, the effects of Cu on exports, imports and other variables and their significances vary from one member to another. According to our results Chile and Venezuela have benefited more than others. However, in case of Venezuela, part of the positive influences such as improvement in the trade balance should be attributed to other factors such as increase in the price of petroleum during the 1970's.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The theory of customs union combines elements of freer trade with elements of greater protection. While it provides freedom of trade between members, it also provides more protection for members. In the second chapter it was analyzed that to appraise the effects of economic integration the distinction is made between trade creation and trade diversion. In a sense, the former represents an improvement in resource utilization while the latter represents a deterioration in resource utilization. In the same chapter we concluded that in dynamic terms the analysis of net trade creation need not necessarily determine the long-run impact of economic integration. In order to determine the total effect a number of factors including the size of the union and its effects on terms of trade were mentioned. At the end of the chapter we concluded that most of the empirical research in this area is confined to trade creation and diversion aspects. They deal, in other words, with the impact of integration on trade flows. However, what we need in the case of developing countries is to analyze and assess the impact of integration on each of the economies of the region.

In the third chapter we discussed some of the sources of problems of LDCs' trade especially as an engine of growth. Many of these countries complain about unsatisfactory terms of trade while others claim that the terms of trade for primary products have worsened for many decades. The instability of export earnings due to low price-elasticities of demand and supply for primary products on world market is another major problem. On the other hand the case for import-substituing industrialization has proved to be needlessly expensive and to have its own problems. Regional integration then has been suggested as a way of increasing the size of the domestic market. To choose any policy, one has to take account of all factors such as natural resource endowments and other characteristics of individual countries such as the size of the market, access to foreign markets, and the availability of physical as well as human capital. The general idea of preferential arrangements has been popular among the LDCs. However not all of them have been successful in achieving their goals.

In the fourth chapter Andean Common Market as a case study was introduced. Then in the following chapter several approximations were provided to the relationship between policy instruments and other variables and development goals such as income, investment, and the balance of payments. In the model membership in the customs union was introduced by variable Cu. The analysis dealt with the estimation of the impact of the various instruments available to each member on target variables in each of the countries of the Andean Group. Because of the relatively high coefficients of determination adjusted for degrees of freedom ($\bar{R}^2$) and the fairly good confirmation of a priori expectations about the direction of effects, the results of estimation appear to be satisfactory despite the shortcomings of the model and lack of appropriate data, all of which were discussed in the same chapter. Among many estimates for consumption, disposable income and particularly institutional changes indicated by the passage of time seem to be the most significant variables affecting consumption in member countries. Chile has the highest MPC and Ecuador has the lowest MPC in the region.

GNP, real rate of interest and institutional changes are the basic factors influencing aggregate private investment in members. The effect of membership in ANCOM on investment according to our estimation, was not significant. However, one should not expect immediate positive and significant effect on investment following economic integration.

Based on our findings membership in Andean Common Market has improved the competitiveness of (only) Ecuador in the world market. Availability of credit to the private sector plays a major role in affecting extra-regional exports only in two member countries, Bolivia and Chile. Among members of the Andean Group, Venezuela is the only country in which foreign demand plays a significant role in influencing extra-regional exports. The results of our estimates indicate that availability of credit followed by institutitional changes have the most significant effect on intra-regional exports of members. GNP is the key factor influencing extra-regional imports of Bolivia, Ecuador and Peru. Passage of time is an important factor affecting extra-regional imports of Venezuela. There is a positive and significant relationship between money supply and the availability of credit for (almost) all members of ANCOM.

In the last chapter we fitted the systems of equations (models) per country together to make one large model for the Andean Common Market. From this system of equations we obtained a set of reduced form coefficients. The basic goal of that chapter was to analyze the impact of policy instruments of year t on target variables in year t and t+1, if any. We found that in certain cases the impact of changes in policy instruments are felt in a single time period and the lagged effects of the policy changes were almost zero. In the case of the monetary policy instrument, the results obtained from reduced form coefficients indicate that its spreading effects on the other country (or countries) are less effective than that of an increase of government spending. Based on our findings the formation of the Andean Group has affected GNP of members and therefore will affect their rate of growth in the future.

In total this study does reveal that the formation of Andean Group has had an influence on investment opportunities for its members. Viewed in terms of problems common to all economic integration system formed by developing countries and problems particular to the Andean Common Market, according to this study the Andean Group achievements have been crucial. In total, ANCOM has gone further than any other less developed countries integration system in a very short period of time. However, to achieve the ultimate purpose of economic integration namely to achieve an acceleration of economic growth in partner countries there are certain economic problems yet to be resolved. One problem is the continued dependence of Andean Economies on a few export crops. A single raw material or agricultural product accounts for 50% of total exports of members excluding Peru. Another problem has been the implementation of ANCOM plans so far. The Cartagena Agreement initially provided for both a common minimal external tariff and a uniform common external tariff. The first was to be approximated by December 1975 and the second by 1980. Bolivia and Ecuador, the two least developed countries of the region were granted duty free access to markets in other members while not starting their own tariff reduction procedure until the end of 1975. The Andean Group failed to meet all of these deadlines. The 1976 protocola de Lima advanced the date upon which the Andean union was to be completed from 1985 to 1988.

The framework for economic integration will not be complete without assessment of the monetary problems or aspects of the union. It is necessary to distinguish between a partial monetary union and a complete monetary union. Under the partial monetary union, member countries agree to maintain fixed exchange rate relationships within the union, but they still have their own central banks. They determine their own money supply. There is no explicit integration of economic policy. There is no common pool of foreign exchange reserves. The partial monetary union system requires monetary authorities in the member countries to intervene foreign exchange market to maintain fixed exchange rates[1]. However, a complete monetary union implies a common monetary policy, and a pooling of foreign exchange reserves. Power to determine monetary policy for the whole area must be centralized. The rate of increase in money supply would be decided jointly. Under complete monetary

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1. For accounting purposes, one of the member's currencies may be used as the reference currency. Alternatively, they may establish a new accounting currency for the purpose. Each member agrees to keep its exchange rate fixed relative to the reference currency. The market rate of reference currency determines the exchange rate for the whole union. Corden, W.M. Inflation, Exchange Rates and the World Economy (Chicago: University of Chicago press; 1977) chapters 10 and 11.

integration the balance of payments of the entire community with the rest of the world must be regulated at the community level, since there is no separate balance of payments deficit or surplus.

The formation of a monetary union gives rise to welfare gains and losses[2]. The creation of Andean Common Market has already deprived national authorities of the use of tariffs and quotas within the union to improve their balance of payments. A commitment to fixed exchange rates would mean the loss of another policy instrument. Fixity of exchange rates and full convertibility of currencies constitute necessary conditions for monetary union. In case of Andean Group in which exchange controls are eliminated for all current account transactions, full convertibility is identical with freedom of capital movements. Unfortunately there is no data available on capital movements. However, if capital mobility is high then it will influence the monetary policy of members. The higher the degree of capital mobility, the less it will be possible for national authorities to use monetary policy for internal purposes. Perfect capital mobility would mean a common interest rate. Then any attempt by national monetary authorities to change the domestic supply of money would only have an effect on capital flow while the domestic supply of money would remain unchanged. So out of three elements, fixed exchange rates, free capital movements and independent monetary policy, a member can only have a combination of two. The fixity of exchange rates may set back capital market integration. Fixed exchange rate among members may put pressure on the balance of payments which may lead to the imposition of restrictions on capital account transactions since restrictions on current account are ruled out. On the other hand, the fixity of exchange rates reduces uncertainity in trade and investment. However, the more open the economy of each member to foreign trade, the more will its employment, price level and its economic growth depend on events and policies followed in other nations. The importance of foreign trade to members of Andean Common Market is provided by Table 7-1. As this table indicates the economies of Andean Group are fairly open, so a fixed exchange rate will affect their domestic income and employment more than floating rate. What is improtant in connection with fixity of exchange rate is that exchange rates between members of the union cannot be kept fixed without problems unless the underlying differences of the national economies come into close harmony. According to facts and figures of chapter four the economies of Andean Group are far from harmony.

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[2] Considering complete monetary union as the ultimate objective which at present is rare among even developed countries, if not impossible, the rest of analysis in this chapter deals with partial rather than complete monetary union. For detail analysis of costs and benefits of monetary integration see Corden, W.M., "Monetary Integration", Princeton Studies in International Finance, No. 93 (Princeton: Princeton University Press; April 1972). Corden, W.M., Inflation, Exchange Rates and The World Economy, op.cit. Ingram, James C., "The case for European Monetary Integration", Princeton Studies in International Finance, No. 98 (Princeton University Press; April 1973).

TABLE 7-1

EXPORTS AND IMPORTS AS PERCENTAGES OF GNP

Year	Bolivia		Colomiba		Ecuador		Peru		Venezuela	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
1973	22.63	23.54	15.19	13.50	25.00	20.00	14.93	15.21	36.23	20.29
1974	28.56	22.07	14.24	16.10	35.56	30.00	16.22	21.62	61.11	19.44
1975	21.15	26.74	15.35	14.85	26.17	29.90	12.34	22.14	42.24	25.86
1976	21.97	24.39	16.83	14.72	28.35	26.77	13.19	19.26	31.58	27.82
1977	21.57	24.40	17.51	13.84	25.48	26.75	17.38	21.94	29.60	36.84
1978	17.59	26.89	17.99	16.40	23.91	25.00	23.19	19.96	25.59	36.90
1979	18.36	24.20	-	-	28.04	28.97	31.85	20.58	-	-

Source: Calculations based on data for individual countries from IMF, International Financial Statistics, June 1980.

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 62      0.00000    0.00000    0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 63     -0.00000   -0.00000    0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000   -0.00000
 64     -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000   -0.00000
 65      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 66      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 67      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 68      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 69      0.00000    0.00000    0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 70      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 71      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 72     -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000   -0.00000
 73      0.00000    0.00000    0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 74      0.00000    0.00000    0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 75      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 76      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 77      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 78     -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000   -0.00000
 79      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 80      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 81      0.00000    0.00000    0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000    0.00000
 82      0.00000    0.00000    0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000    0.00000
 83      0.00000    0.00000    0.00000   -0.00000   -0.00000   -0.00000   -0.00000    0.00000    0.00000    0.00000
 84      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 85      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 86      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 87      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 88      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 89      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 90      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 91      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 92      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 93      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 94      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 95     -0.00000   -0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000   -0.00000
 96      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 97      0.00000    0.00000   -0.00000    0.00000    0.00000    0.00000    0.00000   -0.00000   -0.00000    0.00000
 98      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 99      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
100      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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                                                                                    PAGE  3
A INVERSE
              1          2          3          4          5          6          7          8          9         10
101    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
104    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
105    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
106    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
107    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
108    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
109    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
110    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
111    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
112    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
113    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
114    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
115    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
116    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
117    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
118    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
119    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
120    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
121    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
122    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
123    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
124    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
125    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
126    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
127    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
128    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
129    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
130    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
144    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
145    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
146    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
147    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
148    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
149    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
150    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
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A INVERSE                                                                                                  PAGE  4

             1           2           3           4           5           6           7           8           9          10
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     0.52613     0.52613    -0.41038     0.52613     0.52613     0.52613     0.52613    -0.52613    -0.52613     1.44211
158    -0.08077    -0.08077     0.14434    -0.08077    -0.08077    -0.08077    -0.08077     0.08077     0.08077    -3.20852
159     0.07366     0.07366    -0.05745     0.07366     1.07366     0.07366     0.07366    -0.07366    -0.07366     0.20190
160     0.03157     0.03157    -0.02462     0.03157     0.03157     0.03157     0.03157    -0.03157    -0.03157     0.08653
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                                                                                                        PAGE   5
A INVERSE
              11          12         13          14          15         16          17          18          19          20
  1      0.82200    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  2      0.82200    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  3      0.82200    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  4     -0.64116     0.00000     0.0         0.00000     0.00000     0.0         0.00000    -0.00000     0.00000     0.00000
  5      0.11508    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  6      1.50678     0.0         0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  7      0.10235    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  8      0.18906    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
  9      0.07198    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 10      0.56859    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 11      0.99753     0.00000     0.0         0.00000     0.00000     0.0         0.00000    -0.00000     0.00000     0.00000
 12      1.34808     1.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 13      0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14     -1.82885     0.00000     0.0         1.00000    -0.00000     0.0         1.00000     1.00000     1.00000     1.00000
 15     -1.82885     0.00000     0.0         1.00000     1.00000     0.0         1.00000     1.00000     1.00000     1.00000
 16     -1.82885     0.00000     0.0         1.00000     1.00000     1.00000     1.00000     1.00000     1.00000     1.00000
 17      0.06686    -0.00000     0.0        -0.00000    -0.00000     0.0         1.00000     0.00000    -0.00000    -0.00000
 18      0.04932    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     1.00000    -0.00000    -0.00000
 19     -1.47557     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000     1.00000     0.0
 20     -0.07733     0.00000     0.0         0.00000     0.00000     0.0         0.00000    -0.00000     0.00000     1.00000
 21      0.18495    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 22      0.20719    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 23     -1.75889    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.00000    -0.00000    -0.00000
 24     -0.09617     0.00000     0.0         0.00000     0.00000     0.0         0.00000    -0.00000     0.00000     0.00000
 25     -1.94504     0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     1.00000     1.00000
 26      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 27      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 28      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 29      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 30      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 31      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 32     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 33     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 34      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 35      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 36     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 37      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 38     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 39      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 40      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 41      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 42      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 43      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 44      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 45     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 46     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000
 47      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
 48     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.0         0.00000     0.00000
 49      0.00000     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.0        -0.00000    -0.00000
 50     -0.00000    -0.00000     0.0         0.00000     0.00000     0.0         0.00000     0.0         0.00000     0.00000
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                                                                                       PAGE  6
A INVERSE
          11        12        13        14        15        16        17        18        19        20
 51  -0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 52   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 53  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 54  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 55  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 56  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 57  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 58   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 59   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 60   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000   0.00000  -0.00000  -0.00000
 61   0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 62   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000   0.00000  -0.00000  -0.00000
 63  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.0       0.00000   0.00000
 64  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 65   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 66   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 67   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 68   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 69   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 70   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 71   0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 72  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 73   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000   0.00000  -0.00000  -0.00000
 74   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000   0.0      -0.00000  -0.00000
 75   0.00000   0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 76   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 77   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 78  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000  -0.00000   0.00000   0.00000
 79   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 80   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 81   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 82   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 83   0.00000  -0.00000   0.0      -0.00000  -0.00000   0.0      -0.00000  -0.00000  -0.00000  -0.00000
 84   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 85   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 86   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 87   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 88   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 89   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 90   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 91   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 92   0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 93   0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 94   0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 95  -0.00000   0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 96   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 97   0.00000  -0.00000   0.0       0.00000   0.00000   0.0       0.00000   0.00000   0.00000   0.00000
 98   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 99   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
100   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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A INVERSE                                                                      PAGE  7
              11         12         13         14         15         16         17         18         19         20
101   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
104   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
105   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
106   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
107   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
108   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
109   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
110   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
111   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
112   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
113   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
114   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
115   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
116   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
117   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
118   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
119   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
120   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
121   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
122   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
123   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
124   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
125   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
126   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
127   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
128   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
129   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
130   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
144   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
145   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
146   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
147   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
148   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
149   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
150   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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A INVERSE                                                                                                   PAGE   8

              11          12          13          14          15          16          17          18          19          20
151      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157      0.82200     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.0        -0.00000    -0.00000
158     -1.82885     0.00000     0.0         1.00000     1.00000     0.0         1.00000     1.00000     1.00000     1.00000
159      0.11508    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000
160      0.04932    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     1.00000    -0.00000    -0.00000
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A INVERSE

	21	22	23	24	25	26	27	28	29	30
1	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
2	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
3	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
4	-0.00000	-0.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
5	0.00000	0.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
6	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
7	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
8	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
9	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
10	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
11	-0.00000	-0.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
12	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-1.00000	-1.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
15	-1.00000	-1.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
16	-1.00000	-1.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
17	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
18	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
19	0.0	0.0	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
20	-0.00000	-0.00000	0.0	0.0	0.0	0.0	0.00000	0.00000	0.0	0.00000
21	1.00000	0.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
22	0.00000	1.00000	0.0	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
23	0.00000	0.00000	1.00000	0.0	0.0	0.0	-0.00000	-0.00000	0.0	-0.00000
24	-0.00000	-0.00000	0.0	1.00000	0.0	0.0	0.00000	0.00000	0.0	0.00000
25	-1.00000	-1.00000	0.0	0.0	1.00000	0.0	0.00000	0.00000	0.0	0.00000
26	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0
27	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.11679	-1.11679	0.0	-0.11679
28	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.11679	-0.11679	0.0	-0.11679
29	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.11679	-0.11679	1.00000	-0.11679
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000
31	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.21643	-0.21643	0.0	-0.21643
32	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-0.40714	-0.40714	0.0	-0.40714
33	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-0.49466	-0.49466	0.0	-0.49466
34	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00121	-0.00121	0.0	-0.00121
35	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00023	-0.00023	0.0	-0.00023
36	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-0.00381	-0.00381	0.0	-0.00381
37	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00322	-0.00322	0.0	-0.00322
38	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-0.90036	-0.90036	0.0	-0.90036
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.21139	-0.21139	0.0	-0.21139
41	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.21139	-0.21139	0.0	-0.21139
42	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.21139	-0.21139	0.0	-0.21139
43	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.02920	-0.02920	0.25000	-0.02920
44	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.21139	-0.21139	0.0	-0.21139
45	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-1.43150	-1.43150	0.0	-1.43150
46	-0.00000	-0.00000	0.0	0.0	0.0	0.0	-0.01691	-0.01691	0.0	-0.01691
47	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00618	-0.00618	0.0	-0.00618
48	-0.00000	-0.00000	0.0	0.0	0.0	0.0	0.00012	0.00012	0.0	0.00012
49	0.00000	0.00000	0.0	0.0	0.0	0.0	-0.00166	-0.00166	0.0	-0.00166
50	-0.00000	-0.00000	0.0	0.0	0.0	0.0	0.03139	0.03139	0.0	0.03139

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A INVERSE                                                                                                PAGE 10

            21           22           23           24           25           26           27           28           29           30
 51   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -1.44236     -1.44236      0.0        -1.44236
 52    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 53   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 54   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 55   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 56   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 57   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 58    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0 0          0.0         0.0
 59    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 60    0.00000      0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 61   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 62    0.00000      0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 63   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 64   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 65    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 66    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 67    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 68    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 69    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 70    0.00000      0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 71   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 72   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 73    0.00000      0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 74    0.00000      0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 75    0.00000      0.00000     0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 76    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 77    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0 0          0.0         0.0
 78   -0.00000     -0 00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 79    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 80    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 81    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 82    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 83    0.00000      0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 84    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 85    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 86    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 87    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 88    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 89    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 90    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 91    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 92   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 93   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 94   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 95   -0.00000     -0.00000     0.0          0.0          0.0          0.0        -0.00000     -0.00000      0.0        -0.00000
 96    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 97   -0.00000     -0.00000     0.0          0.0          0.0          0.0         0.00000      0.00000      0.0         0.00000
 98    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
 99    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
100    0.0          0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0
```

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A INVERSE                                                                                                    PAGE 11

                 21               22               23               24               25               26               27               28               29               30
101       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
102       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
103       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
104       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
105       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
106       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
107       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
108       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
109       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
110       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
111       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
112       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
113       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
114       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
115       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
116       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
117       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
118       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
119       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
120       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
121       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
122       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
123       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
124       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
125       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
126       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
127       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
128       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
129       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
130       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
131       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
132       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
133       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
134       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
135       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
136       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
137       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
138       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
139       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
140       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
141       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
142       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
143       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
144       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
145       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
146       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
147       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
148       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
149       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
150       0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0              0.0
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                                                                                                          PAGE  12
A INVERSE
           21          22          23          24          25          26          27          28          29          30
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     0.00000     0.00000     0.0         0.0         0.0         0.0        -0.11679    -0.11679     0.0        -0.11679
158    -1.00000    -1.00000     0.0         0.0         0.0         0.0        -0.21139    -0.21139     0.0        -0.21139
159     0.00000     0.00000     0.0         0.0         0.0         0.0        -0.21643    -0.21643     0.0        -0.21643
160     0.00000     0.00000     0.0         0.0         0.0         0.0        -0.21139    -0.21139     0.0        -0.21139
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A INVERSE                                                                                                                  PAGE 13

                31            32            33            34            35            36            37            38            39            40
   1       0.00000      -0.00000       0.0          -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
   2       0.00000      -0.00000       0.0          -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
   3       0.00000      -0.00000       0.0          -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
   4      -0.00000       0.00000       0.0           0.00000      -0.00000       0.00000       0.00000       0.00000       0.0           0.00000
   5       0.00000      -0.00000       0.0          -0.00000      -0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
   6       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
   7       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
   8       0.00000      -0.00000       0.0          -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
   9       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
  10       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
  11      -0.00000       0.00000       0.00000       0.0          -0.00000       0.00000       0.00000       0.00000       0.0           0.00000
  12       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
  13       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  14       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  15       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  16       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  17       0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  18       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  19       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  20      -0.00000       0.00000       0.0          -0.00000      -0.00000       0.00000       0.00000      -0.00000       0.0           0.00000
  21       0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  22       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.0          -0.00000
  23       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000
  24      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000       0.0           0.00000
  25      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0           0.00000
  26       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  27      -0.11679      -0.11679      -0.11679       0.11679       0.11679     -27.67848     -32.66061      -0.00000       0.0          -0.00000
  28      -0.11679      -0.11679      -0.11679       0.11679       0.11679     -27.67848     -32.66061      -0.00000       0.0          -0.00000
  29      -0.11679      -0.11679      -0.11679       0.11679       0.11679     -27.67848     -32.66061      -0.00000       0.0          -0.00000
  30       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  31       0.78357      -0.21643      -0.21643       0.21643       0.21643     -51.29266     -60.52534      -0.00000       0.0          -0.00000
  32      -0.40714       0.59286      -0.40714       0.40714       0.40714      10.51174      12.40385       0.0           0.0           0.00000
  33      -0.49466      -0.49466       0.50534       0.49466       0.49466      12.77127      15.07010       0.0           0.0           0.00000
  34      -0.00121      -0.00121      -0.00121       1.00121       0.00121      -0.27580      -0.32545      -0.00000       0.0          -0.00000
  35      -0.00023      -0.00023      -0.00023       0.00023       1.00023      -0.05536      -0.06532      -0.00000       0.0          -0.00000
  36      -0.00381      -0.00381      -0.00381       0.00381       0.00381       0.09824       0.11592      -0.00000       0.0           0.00000
  37      -0.00322      -0.00322      -0.00322       0.00322       0.00322      -0.76420       0.09824      -0.00000       0.0          -0.00000
  38      -0.90036       0.09964       0.09964      -0.09964      -0.09964      23.61417      27.86473       1.00000       0.0           0.00000
  39       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0
  40      -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0           1.00000
  41      -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0           1.00000
  42      -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0           1.00000
  43      -0.02920      -0.02920      -0.02920       0.02920       0.02920      -6.91962      -8.16515      -0.00000       0.0          -0.00000
  44      -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0          -0.00000
  45      -1.43150      -1.43150      -1.43150       1.43150       1.43150      36.95918      43.61184      -0.00000       0.0           0.00000
  46      -0.01691      -0.01691      -0.01691       0.01691       0.01691       0.43670       0.51530       0.00000       0.0           0.00000
  47      -0.00618      -0.00618      -0.00618       0.00618       0.00618      -2.45869      -2.90126      -0.00000       0.0          -0.00000
  48       0.00012       0.00012       0.00012      -0.00012      -0.00012       0.02768       0.03266       0.00000       0.0           0.00000
  49      -0.00166      -0.00166      -0.00166       0.00166       0.00166      -0.39395       0.05064      -0.00000       0.0          -0.00000
  50       0.03139       0.03139       0.03139      -0.03139      -0.03139       7.43970       8.77885       0.00000       0.0           0.00000
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A INVERSE                                                                                                                PAGE 14
              31            32            33            34            35            36            37            38          39          40
 51    -1.44236      -1.44236      -1.44236       1.44236       1.44236      39.82690      46.99574      -0.00000       0.0         0.00000
 52     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 53    -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.0         0.00000
 54    -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.0         0.00000
 55    -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.0         0.00000
 56    -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.0         0.00000
 57     0.0           0.0           0.0           0.00000       0.0           0.0           0.0           0.0           0.0         0.00000
 58     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 59     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 60    -0.00000       0.0           0.0          -0.00000       0.0          -0.00000       0.0          -0.00000       0.0        -0.00000
 61     0.00000       0.0           0.0           0.00000       0.0           0.00000       0.0           0.00000       0.0         0.00000
 62    -0.00000       0.0           0.0          -0.00000       0.0          -0.00000       0.0          -0.00000       0.0        -0.00000
 63     0.0          -0.00000      -0.00000       0.00000       0.00000       0.00000       0.0          -0.00000       0.0         0.00000
 64     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.00000
 65     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 66     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.0        -0.00000
 67     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.0        -0.00000
 68     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.0        -0.00000
 69     0.00000       0.0           0.0          -0.00000       0.0           0.0           0.0           0.00000       0.0        -0.00000
 70     0.0           0.00000       0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.0        -0.00000
 71    -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0         0.00000
 72     0.00000       0.00000       0.00000       0.0          -0.00000       0.00000       0.00000       0.00000       0.0         0.00000
 73    -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0        -0.00000
 74    -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0        -0.00000
 75    -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0          -0.00000       0.0        -0.00000
 76     0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.00000       0.00000       0.0        -0.00000
 77     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 78     0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.0         0.00000
 79     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 80     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 81    -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0        -0.00000
 82    -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0        -0.00000
 83    -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0        -0.00000
 84     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 85     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 86     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 87     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 88     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 89     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 90     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 91     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 92     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0         0.00000
 93     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0         0.00000
 94     0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0         0.00000
 95     0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0         0.00000
 96     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 97     0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.00000       0.00000       0.0         0.00000
 98     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
 99     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
100     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0         0.0
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A INVERSE                                                                                PAGE 15
                  31          32          33          34          35          36          37          38          39          40
101     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
102     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
103     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
104     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
105     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
106     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
118     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A INVERSE                                                                                             PAGE  16

               31            32            33            34            35            36            37            38           39            40
151      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
152      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
153      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
154      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
155      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
156      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
157     -0.11679      -0.11679      -0.11679       0.11679       0.11679     -27.67848     -32.66061      -0.00000       0.0          -0.00000
158     -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0           1.00000
159      0.78357      -0.21643      -0.21643       0.21643       0.21643     -51.29266     -60.52534      -0.00000       0.0          -0.00000
160     -0.21139      -0.21139      -0.21139       0.21139       0.21139     -50.09778     -59.11538      -0.00000       0.0          -0.00000
```

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A INVERSE                                                                                                   PAGE 17

             41           42           43           44           45           46           47           48           49           50
   1   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   2   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   3   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   4    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   5   -0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   6   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   7   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   8   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
   9   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  10   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  11    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  12   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  13    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  14   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  15   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  16   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  17   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  18   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  19   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  20    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  21   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  22   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  23   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  24    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  25    0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  26    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  27   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  28   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  29   -0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  30    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  31   -0.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  32    0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  33    0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  34   -0.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  35   -0.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  36    0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  37   -0.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  38    0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  39    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  40   -0.00000      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  41    1.00000      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  42    1.00000      1.00000      0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  43   -0.00000      0.0          1.00000      0.00000      0.0          0.0          0.0          0.0          0.0          0.0
  44   -0.00000      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  45    0.00000      0.0          0.0          0.00000      1.00000      0.0          0.0          0.0          0.0          0.0
  46    0.00000      0.0          0.0          0.00000      0.0          1.00000      0.0          0.0          0.0          0.0
  47   -0.00000      0.0          0.0          0.00000      0.0          0.0          1.00000      0.0          0.0          0.0
  48    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          1.00000      0.0          0.0
  49   -0.00000      0.0          0.0          0.00000      0.0          0.0          0.0          0.0          1.00000      0.0
  50    0.00000      0.0          0.0         -0.00000      0.0          0.0          0.0          0.0          0.0          1.00000
```

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A INVERSE                                                                                             PAGE 18
            41          42          43          44          45          46          47          48          49          50
 51    0.00000     0.0         0.0         0.00000     1.00000     1.00000    -1.00000    -1.00000     0.0         0.0
 52    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 54    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 55    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 56    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 57    0.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 58    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 61    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 62   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 63    0.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 64    0.00000     0.0         0.0         0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 65    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 66   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 67   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 68   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 69   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 70   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 71    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 72    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 73   -0.00000     0.0         0.0         0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 74   -0.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 75   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 76   -0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 77    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 79    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81   -0.00000     0.0         0.0         0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 82   -0.00000     0.0         0.0         0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 83   -0.00000     0.0         0.0         0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 84    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 90    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 93    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 94    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 95    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 96    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 97    0.00000     0.0         0.0        -0.00000     0.0         0.0         0.0         0.0         0.0         0.0
 98    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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A INVERSE PAGE 19

	41	42	43	44	45	46	47	48	49	50
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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                                                                                                    PAGE 20
A INVERSE
                41            42            43            44            45            46            47            48            49            50
 151     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 152     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 153     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 154     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 155     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 156     0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 157    -0.00000       0.0           0.0           0.00000       0.0           0.0           0.0           0.0           0.0           0.0
 158     1.00000       0.0           0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0
 159    -0.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 160    -0.00000       0.0           0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0
```

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A INVERSE                                                                                          PAGE 21

          51          52          53          54          55          56          57          58          59          60
 1     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 2     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 3     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 4     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
 5     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 6     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 7     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 8     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
 9     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
10     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
11     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
12     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
13     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
14     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
15     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
16     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
17     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
18     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
19     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
20     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
21     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
22     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
23     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
24     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
25     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
26     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
27     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
28     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
29     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
30     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
31     0.0         0.0         0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000
32     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000
33     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000
34     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
35     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
36     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000
37     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
38     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000
39     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
40     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
41     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
42     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
43     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
44     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
45     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
46     0.0         0.0        -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000
47     0.0         0.0         0.00000     0.00000     0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000
48     0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.00000
49     0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000
50     0.0         0.0         0.00000     0.00000     0.0         0.00000     0.00000     0.00000     0.00000    -0.00000
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A INVERSE                                                                                                                    PAGE 22
              51           52           53           54           55           56           57           58           59           60
  51     1.00000      0.0         -0.00000     -0.00000      0.00000     -0.00000     -0.00000      0.00000      0.00000     -0.00000
  52     0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  53     0.0          0.0          2.18694      1.18694      1.39964      2.18694      2.18694      2.18694      2.18694     -2.18694
  54     0.0          0.0          2.18694      2.18694      1.39964      2.18694      2.18694      2.18694      2.18694     -2.18694
  55     0.0          0.0          2.18694      2.18694      2.39964      2.18694      2.18694      2.18694      2.18694     -2.18694
  56     0.0          0.0          1.39916      1.39916      1.53546      2.39916      1.39916      1.39916      1.39916     -1.39916
  57     0.0          0.0         -0.16301     -0.16301     -0.10433     -0.16301      0.83699     -0.16301     -0.16301      0.16301
  58     0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0
  59     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0
  60     0.0          0.0          0.03004      0.03004      0.01923      0.03004      0.03004      0.03004      0.03004      0.96996
  61     0.0          0.0          0.01916      0.01916      0.01226      0.01916      0.01916      0.01916      0.01916     -0.01916
  62     0.0          0.0          0.01113      0.01113      0.00712      0.01113      0.01113      0.01113      0.01113     -0.01113
  63     0.0          0.0          0.02099      0.02099      0.01344      0.02099      0.02099      0.02099      0.02099     -0.02099
  64     0.0          0.0         -0.04920     -0.04920     -0.03149     -0.04920     -0.04920      0.95080      0.95080     -0.95080
  65     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  66     0.0          0.0         -1.31798     -1.31798     -1.25150     -1.31798     -1.31798     -1.31798     -1.31798      1.31798
  67     0.0          0.0         -1.31798     -1.31798     -1.25150     -1.31798     -1.31798     -1.31798     -1.31798      1.31798
  68     0.0          0.0         -1.31798     -1.31798     -1.25150     -1.31798     -1.31798     -1.31798     -1.31798      1.31798
  69     0.0          0.0         -0.89227     -0.89227     -0.97906     -0.89227     -0.89227     -0.89227     -0.89227      0.89227
  70     0.0          0.0         -0.84657     -0.84657     -0.54180     -0.84657     -0.84657     -0.84657     -0.84657      0.84657
  71     0.0          0.0          0.00406      0.00406      0.00260      0.00406      0.00406      0.00406      0.00406     -0.00406
  72     0.0          0.0         -0.00150     -0.00150     -0.00096     -0.00150     -0.00150     -0.00150     -0.00150      0.00150
  73     0.0          0.0         -0.38550     -0.38550     -0.24672     -0.38550     -0.38550     -0.38550     -0.38550      0.38550
  74     0.0          0.0         -0.03280     -0.03280     -0.02099     -0.03280     -0.03280     -0.03280     -0.03280      0.03280
  75     0.0          0.0         -0.01509     -0.01509     -0.00966     -0.01509     -0.01509     -0.01509     -0.01509      0.01509
  76     0.0          0.0         -0.48113     -0.48113     -0.30792     -0.48113     -0.48113     -0.48113     -0.48113      0.48113
  77     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  78     0.0          0.0          0.42086      0.42086      0.26935      0.42086      0.42086      0.42086      0.42086     -0.42086
  79     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  80     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  81     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  82     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  83     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  84     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  85     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  86     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  87     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  88     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  89     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  90     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  91     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  92     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  93     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  94     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  95     0.0          0.0         -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000      0.00000
  96     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  97     0.0          0.0          0.00000      0.00000      0.00000      0.00000      0.00000      0.00000      0.00000     -0.00000
  98     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  99     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 100     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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A INVERSE                                                                                          PAGE 23
                 51          52          53          54          55          56          57          58          59          60
 101    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 102    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 103    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 104    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 105    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 106    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 107    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 108    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 109    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 110    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 111    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 112    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 113    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 114    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 115    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 116    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 117    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 118    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 119    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 120    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 121    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 122    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 123    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 124    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 125    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 126    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 127    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 128    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 129    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 130    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 131    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 132    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 133    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 134    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 135    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 136    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 137    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 138    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 139    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 140    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 141    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 142    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 143    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 144    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 145    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 146    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 147    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 148    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 149    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 150    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A INVERSE                                                                                                   PAGE 24
               51          52          53          54          55          56          57          58          59          60
151    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157    0.0         0.0          2.18694     2.18694     1.39964     2.18694     2.18694     2.18694     2.18694    -2.18694
158    0.0         0.0         -1.31798    -1.31798    -1.25150    -1.31798    -1.31798    -1.31798    -1.31798     1.31798
159    0.0         0.0         -0.16301    -0.16301    -0.10433    -0.16301     0.83699    -0.16301    -0.16301     0.16301
160    0.0         0.0         -0.84657    -0.84657    -0.54180    -0.84657    -0.84657    -0.84657    -0.84657     0.84657
```

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A INVERSE
             61         62         63         64         65         66         67         68         69         70
  1    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  2    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  3    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  4     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000   -0.00000
  5    -0.00000   -0.00000   -0.00000    0.0        0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  6    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  7    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  8    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
  9    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 10    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 11     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000   -0.00000
 12    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 13     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 14     0.00000    0.00000    0.00000   -0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 15     0.00000    0.00000    0.00000   -0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 16     0.00000    0.00000    0.00000   -0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 17    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 18    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 19     0.00000   -0.00000    0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 20     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000   -0.00000
 21    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 22    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 23    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 24     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000   -0.00000
 25     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 26     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 27    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 28    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 29    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 30     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 31     0.00000    0.00000    0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000   -0.00000
 32    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 33    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 34    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 35    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 36    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 37    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 38    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 39     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 40    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 41    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 42    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 43    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.00000
 44    -0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 45    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 46    -0.00000   -0.00000   -0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.00000
 47    -0.00000    0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 48     0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.0
 49     0.00000   -0.00000   -0.00000    0.00000    0.0       -0.00000   -0.00000    0.0       -0.00000    0.0
 50    -0.00000    0.00000    0.00000   -0.00000    0.0        0.00000    0.00000    0.0        0.00000    0.0
```

```
A INVERSE                                                                                                              PAGE 26

            61            62            63            64            65            66            67            68            69            70
 51   -0.00000      -0.00000      -0.00000      -0.00000       0.0           0.00000       0.00000       0.0           0.00000       0.00000
 52    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 53   -2.18694      -6.18905      -3.33028       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 54   -2.18694      -6.18905      -3.33028       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 55   -2.18694      -6.18905      -3.33028       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 56   -1.39916      -3.95963      -2.15355       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 57    0.16301       0.46133       0.24824       0.00000       0.0           0.00000       0.00000       0.0           0.00000       0.00000
 58    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 59    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 60   -0.03004       2.61498       1.38525       0.0           0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 61    0.98084       0.07577       0.03972       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 62   -0.01113       0.96851       0.51306      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 63   -0.02099      -0.05941       0.96803       0.00000       0.0           0.00000       0.00000       0.0           0.00000       0.0
 64   -0.95080      -2.69075      -1.42497       1.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 65    0.0           0.0           0.0           0.0           1.00000       0.0           0.0           0.0           0.0           0.0
 66    1.31798       3.50657       1.88866      -0.00000       0.0           1.00000      -0.00000       0.0           1.00000       1.00000
 67    1.31798       3.50657       1.88866      -0.00000       0.0           1.00000       1.00000       0.0           1.00000       1.00000
 68    1.31798       3.50657       1.88866      -0.00000       0.0           1.00000       1.00000       1.00000       1.00000       1.00000
 69    0.89227       2.52513       1.35875      -0.00000       0.0          -0.00000      -0.00000       0.0           1.00000       0.00000
 70    0.84657       2.39578       1.28915      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       1.00000
 71   -0.00406       0.35370       0.18737       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 72    0.00150      -0.13065      -0.06921       0.00000       0.0           0.00000       0.00000       0.0           0.00000       0.00000
 73    0.38550       1.54456       0.82744      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 74    0.03280       0.09284       0.04995      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000      -0.00000
 75    0.01509       0.04271      -0.69587      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000      -0.00000
 76    0.48113       1.36159       0.73266      -0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000      -0.00000
 77    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 78   -0.42086      -1.41435      -0.75924       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 79    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 80    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 81   -0.00000      -0.00000       0.0           0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 82   -0.00000      -0.00000       0.0           0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 83   -0.00000      -0.00000       0.0           0.00000       0.0          -0.00000      -0.00000       0.0          -0.00000       0.00000
 84    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 85    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 86    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 87    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 88    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 89    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 90    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 91    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 92   -0.00000      -0.00000      -0.00000       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 93   -0.00000      -0.00000      -0.00000       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 94   -0.00000      -0.00000      -0.00000       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 95    0.00000       0.00000       0.0          -0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 96    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 97   -0.00000      -0.00000      -0.00000       0.00000       0.0           0.00000       0.00000       0.0           0.00000      -0.00000
 98    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 99    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
100    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
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A INVERSE                                                                                                       PAGE 27
                  61          62          63          64          65          66          67          68          69          70
101      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
102      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
103      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
104      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
105      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
106      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
118      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A INVERSE                                                                                                          PAGE 28

                61          62          63          64          65          66          67          68          69          70
151      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     -2.18694    -6.18905    -3.33028     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.0
158      1.31798     3.50657     1.88866    -0.00000     0.0         1.00000     1.00000     0.0         1.00000     1.00000
159      0.16301     0.46133     0.24824     0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     0.0
160      0.84657     2.39578     1.28915    -0.00000     0.0        -0.00000    -0.00000     0.0        -0.00000     1.00000
```

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A INVERSE                                                                                                         PAGE 29

              71          72          73          74          75          76          77          78          79          80
   1    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
   2    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
   3    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
   4     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000     0.0         0.0
   5    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
   6    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
   7    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
   8    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
   9    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  10    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  11     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000     0.00000     0.00000
  12    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.0         0.0
  13     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  14     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  15     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  16     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  17    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  18    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  19     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  20     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  21    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  22    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  23    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  24     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  25     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  26     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  27     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  28     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  29     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  30     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  31     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000     0.00000     0.00000
  32    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  33    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  34     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  35     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  36    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  37     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  38    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  39     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  40     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  41     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  42     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  43     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  44     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  45    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  46    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000    -0.00000    -0.00000
  47     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000     0.00000     0.00000
  48    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
  49     0.00000     0.00000    -0.00000    -0.00000     0.0         0.0         0.0         0.00000    -0.00000    -0.00000
  50    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0        -0.00000     0.00000     0.00000
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A INVERSE                                                                                                           PAGE 30
             71            72            73            74            75            76            77            78            79            80
  51   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  52    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  53    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  54    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  55    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  56    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  57   -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  58    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  59    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  60   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  61   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  62   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  63    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  64    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000      -0.00000      -0.00000
  65    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  66    1.00000       1.00000      -1.00000      -1.00000       0.0           0.0           0.0          -0.00000       0.00000       0.00000
  67    1.00000       1.00000      -1.00000      -1.00000       0.0           0.0           0.0          -0.00000       0.00000       0.00000
  68    1.00000       1.00000      -1.00000      -1.00000       0.0           0.0           0.0          -0.00000       0.00000       0.00000
  69   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  70   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  71    1.00000       0.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.00000       0.00000
  72    0.00000       1.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.00000      -0.00000      -0.00000
  73    0.00000       0.00000       1.00000      -0.00000       0.0           0.0           0.0           0.00000       0.00000       0.00000
  74   -0.00000      -0.00000       0.00000       1.00000       0.0           0.0           0.0          -0.00000       0.00000       0.00000
  75   -0.00000      -0.00000       0.00000       0.00000       1.00000       0.0           0.0           0.00000       0.00000       0.00000
  76   -0.00000      -0.00000       0.00000       0.00000       0.0           1.00000       0.0          -0.00000       0.00000       0.00000
  77    0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0           0.0
  78    1.00000       1.00000      -1.00000      -1.00000       0.0           0.0           0.0           1.00000      -0.00000      -0.00000
  79    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0
  80    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       1.00000
  81   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0          -0.00000       3.33924       3.33924
  82   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0          -0.00000       0.75357       0.75357
  83   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0          -0.00000       2.05278       2.05278
  84    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  85    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.00209       0.00209
  86    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.47365       0.47365
  87    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.00445      -0.00445
  88    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.00394       0.00394
  89    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.13450       0.13450
  90    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.46711      -0.46711
  91    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  92   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000      -1.06274      -1.06274
  93   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000      -1.06274      -1.06274
  94   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000      -1.06274      -1.06274
  95    0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.00000      -2.67637      -2.67637
  96    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.80900       1.80900
  97   -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0          -0.01887      -0.01887
  98    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.00248      -0.00248
  99    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.20873       0.20873
 100    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.03470      -0.03470
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A INVERSE                                                                                                         PAGE 31
                 71           72           73           74           75           76           77           78           79           80
101   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          -0.07514     -0.07514
102   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          -0.24870     -0.24870
103   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          -0.17651     -0.17651
104   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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A INVERSE                                                                                   PAGE 32

             71          72          73          74          75          76          77          78          79          80
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     0.00000     0.00000     0.00000    -0.00000     0.0         0.0         0.0        -0.00000     1.00000     1.00000
158     1.00000     1.00000    -1.00000    -1.00000     0.0         0.0         0.0        -0.00000    -1.06274    -1.06274
159     0.00000     0.00000     0.00000    -0.00000     0.0         0.0         0.0         0.00000     2.05278     2.05278
160    -0.00000    -0.00000     0.00000     0.00000     0.0         0.0         0.0         0.00000     1.80900     1.80900
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A INVERSE

PAGE 33

	81	82	83	84	85	86	87	88	89	90
1	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
2	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
3	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
4	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
5	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
6	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
7	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
8	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
9	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
10	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
11	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
12	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
15	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
16	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
17	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
18	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
19	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
20	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
21	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
22	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
23	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0
24	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
25	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	-0.00000	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
28	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
29	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0
32	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
33	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
34	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
35	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
36	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
37	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
38	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
41	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
42	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
43	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
44	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
45	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
46	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000	0.0
47	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
48	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0
49	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.00000	0.0
50	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0

```
A INVERSE                                                                                     PAGE 34

            81        82        83        84        85        86        87        88        89        90
  51  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000   0.00000   0.00000   0.0
  52   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  53  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  54  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  55  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  56  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000  -0.00000   0.0
  57   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  58   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  59   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  60   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  61   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  62   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  63  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  64  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  65   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  66   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  67   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  68   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  69   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  70   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  71   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000   0.00000   0.0
  72  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000  -0.00000   0.0
  73   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  74   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  75   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  76   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000   0.00000  -0.00000   0.0
  77   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  78  -0.00000  -0.00000  -0.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  79   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  80   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  81   1.33333   1.33333   1.33333   1.33333   1.33333  -1.33333  -1.33333   0.53853  -0.78961   0.0
  82   0.33333   1.33333   0.33333   0.33333   0.33333  -0.33333  -0.33333   0.13463  -0.80144   0.0
  83  -0.00000  -0.00000   1.00000  -0.00000  -0.00000   0.00000   0.00000  -0.00000   0.00000   0.0
  84   0.0       0.0       0.0       1.00000   0.0       0.0       0.0       0.0       0.0       0.0
  85   0.0       0.0       0.0       0.0       1.00000   0.0       0.0       0.53000   0.01553   0.0
  86   0.0       0.0       0.0       0.0       0.0       1.00000   0.0      -0.01390  -0.00041   0.0
  87   0.0       0.0       0.0       0.0       0.0       0.0       1.00000   0.14000   0.00410   0.0
  88   0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.00000   0.02930   0.0
  89   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.00000   0.0
  90   0.0       0.0       0.0       1.00000   1.00000  -1.00000  -1.00000   0.40390   0.01183   1.00000
  91   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  92  -1.06865  -1.06865  -1.06865  -1.06865  -1.06865   1.06865   1.06865  -2.53217   0.57132   0.0
  93  -1.06865  -1.06865  -1.06865  -1.06865  -1.06865   1.06865   1.06865  -2.53217   0.57132   0.0
  94  -1.06865  -1.06865  -1.06865  -1.06865  -1.06865   1.06865   1.06865  -2.53217   0.57132   0.0
  95  -1.06865  -1.06865  -1.06865  -1.06865  -1.06865   1.06865   1.06865  -0.43163   0.63286   0.0
  96   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  97   0.00000   0.00000   0.00000   0.00000   0.00000  -0.00000  -0.00000  -4.78815  -0.14029   0.0
  98   0.0       0.0       0.0       0.0       0.0       0.0       0.0      -0.62956  -0.01845   0.0
  99   0.0       0.0       0.0       0.0       0.0       0.0       0.0      -3.31717  -0.09719   0.0
 100   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
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                                                                                                                          PAGE 35
 A INVERSE
               81            82            83            84            85            86            87            88            89            90
 101   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.55869       0.0
 102   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 103   0.0           0.0           0.0           0.0           0.0           0.0           0.0           2.68761       0.07875       0.0
 104   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 105   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 106   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 107   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 108   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 109   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 110   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 111   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 112   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 113   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 114   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 115   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 116   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 117   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 118   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 119   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 120   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 121   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 122   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 123   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 124   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 125   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 126   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 127   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 128   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 129   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 130   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 131   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 132   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 133   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 134   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 135   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 136   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 137   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 138   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 139   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 140   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 141   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 142   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 143   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 144   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 145   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 146   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 147   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 148   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 149   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 150   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
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A INVERSE
            81          82          83          84          85          86          87          88          89          90
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000     0.00000     0.0
158    -1.06865    -1.06865    -1.06865    -1.06865    -1.06865     1.06865     1.06865    -2.53217     0.57132     0.0
159    -0.00000    -0.00000     1.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000     0.00000     0.0
160     0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.0
```

A INVERSE

	91	92	93	94	95	96	97	98	99	100
1	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
2	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
3	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
4	0.0	0.00000	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000
5	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
6	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
7	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
8	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
9	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
10	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
11	0.0	0.00000	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000
12	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
15	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
16	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
17	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
18	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
19	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
20	0.0	0.00000	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000
21	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
22	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
23	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000
24	0.0	0.00000	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000
25	0.0	0.00000	0.00000	0.0	0.00000	0.00000	0.00000	0.00000	-0.00000	-0.00000
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
28	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
29	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	-0.00000	-0.00000	0.0	-0.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000
32	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
33	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
34	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
35	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
36	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
37	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
38	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
41	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
42	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
43	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
44	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
45	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
46	0.0	0.00000	0.00000	0.0	0.00000	0.00000	-0.00000	0.00000	-0.00000	-0.00000
47	0.0	-0.00000	-0.00000	0.0	0.00000	0.00000	0.00000	-0.00000	0.00000	0.00000
48	0.0	0.00000	0.00000	0.0	-0.00000	0.0	-0.00000	0.00000	-0.00000	-0.00000
49	0.0	-0.00000	-0.00000	0.0	0.00000	0.0	0.00000	-0.00000	0.00000	0.00000
50	0.0	0.00000	0.00000	0.0	-0.00000	0.0	-0.00000	0.00000	-0.00000	-0.00000

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A INVERSE                                                                                              PAGE 38
               91            92          93           94          95          96          97          98          99         100
 51     0.0          0.00000     0.00000     0.0          0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000
 52     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 53     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 54     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 55     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 56     0.0          0.00000     0.00000     0.0          0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000
 57     0.0          0.00000     0.00000     0.0         -0.00000     0.0         0.00000     0.00000    -0.00000    -0.00000
 58     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 59     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 60     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 61     0.0          0.00000     0.00000     0.0         -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000
 62     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 63     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 64     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 65     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 66     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 67     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 68     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 69     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 70     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 71     0.0          0.00000     0.00000     0.0         -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000
 72     0.0          0.00000     0.00000     0.0          0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000
 73     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 74     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 75     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 76     0.0         -0.00000    -0.00000     0.0         -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 77     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 78     0.0          0.00000     0.00000     0.0          0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 79     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 80     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 81     0.0         -0.00000    -0.00000     0.0          0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 82     0.0         -0.00000    -0.00000     0.0          0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 83     0.0         -0.00000    -0.00000     0.0          0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000
 84     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 85     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 86     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 87     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 88     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 89     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 90     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 91     1.00000      0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         0.0
 92     0.0          1.00000     0.00000     0.0          1.00000     1.00000     1.00000     1.00000    -1.00000    -1.00000
 93     0.0          1.00000     1.00000     0.0          1.00000     1.00000     1.00000     1.00000    -1.00000    -1.00000
 94     0.0          1.00000     1.00000     1.00000      1.00000     1.00000     1.00000     1.00000    -1.00000    -1.00000
 95     0.0          0.00000     0.00000     0.0          1.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 96     0.0          0.0         0.0         0.0          0.0         1.00000     0.0         0.0         0.0         0.0
 97     0.0          0.00000     0.00000     0.0         -0.00000     0.00000     1.00000     0.00000    -0.00000    -0.00000
 98     0.0          0.0         0.0         0.0          0.0         0.0         0.0         1.00000     0.0         0.0
 99     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         1.00000     0.0
100     0.0          0.0         0.0         0.0          0.0         0.0         0.0         0.0         0.0         1.00000
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A INVERSE                                                                                                         PAGE 39
               91           92           93           94           95           96           97           98           99          100
101    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103    0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000     -1.00000     -1.00000
104    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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                                                                                                              PAGE 40
A INVERSE
                91          92           93          94          95          96          97          98          99         100
151    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
152    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
153    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
154    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
155    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
156    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137    0.0         -0.00000     -0.00000      0.0          0.00000      0.0         -0.00000     -0.00000      0.00000      0.00000
158    0.0          1.00000      1.00000      0.0          1.00000      1.00000      1.00000      1.00000     -1.00000     -1.00000
159    0.0         -0.00000     -0.00000      0.0          0.00000     -0.00000      0.00000     -0.00000      0.00000      0.00000
160    0.0         -0.00000     -0.00000      0.0          0.00000      1.00000      0.00000     -0.00000      0.00000      0.00000
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A INVERSE                                                                                       PAGE 41
            101         102         103         104         105         106         107         108         109         110
  1  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
  2  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
  3  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
  4  0.0         0.0         0.0         0.0         0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
  5  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.0
  6  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
  7  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
  8  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.0         0.00000
  9  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 10  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 11  0.0         0.0         0.0         0.0         0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 12  0.0         0.0         0.0         0.0         0.0         0.0        -0.00000     0.00000     0.00000     0.00000
 13  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000
 15  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000
 16  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000
 17  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 18  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000     0.00000    -0.00000
 19  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000
 20  0.0         0.0         0.0         0.0         0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 21  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 22  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 23  0.0         0.0         0.0         0.0        -0.00000    -0.00000    -0.00000    -0.00000     0.00000    -0.00000
 24  0.0         0.0         0.0         0.0         0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 25  0.0         0.0         0.0         0.0         0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000
 26  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 27  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 28  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 29  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 30  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 31  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 32  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000
 33  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000
 34  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 35  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 36  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000
 37  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 38  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000
 39  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 40  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 41  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 42  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 43  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 44  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 45  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000
 46  0.0         0.0         0.0         0.0         0.00000     0.00000    -0.00000     0.00000     0.0         0.00000
 47  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 48  0.0         0.0         0.0         0.0         0.0         0.0        -0.00000     0.0         0.00000     0.0
 49  0.0         0.0         0.0         0.0        -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 50  0.0         0.0         0.0         0.0         0.0         0.0        -0.00000     0.0         0.00000     0.0
```

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A INVERSE                                                                                                        PAGE 42
              101          102          103          104          105          106          107          108          109          110
  51   0.0          0.0          0.0          0.0           0.00000      0.00000     -0.00000      0.00000      0.00000      0.00000
  52   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  53   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  54   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  55   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  56   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  57   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  58   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  59   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  60   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  61   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  62   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  63   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  64   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  65   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  66   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  67   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  68   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  69   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  70   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  71   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  72   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  73   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  74   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  75   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  76   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000      0.00000      0.00000
  77   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  78   0.0          0.0          0.0          0.0          -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000
  79   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  80   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  81   0.0          0.0          0.0          0.0           0.0          0.0         -0.00000     -0.00000      0.00000      0.00000
  82   0.0          0.0          0.0          0.0           0.0          0.0         -0.00000     -0.00000      0.00000      0.00000
  83   0.0          0.0          0.0          0.0           0.0          0.0         -0.00000     -0.00000      0.00000      0.00000
  84   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  85   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  86   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  87   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  88   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  89   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  90   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  91   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  92   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000
  93   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000
  94   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000
  95   0.0          0.0          0.0          0.0           0.0          0.0          0.00000      0.00000     -0.00000     -0.00000
  96   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  97   0.0          0.0          0.0          0.0           0.00000      0.00000      0.00000      0.00000     -0.00000      0.00000
  98   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
  99   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
 100   0.0          0.0          0.0          0.0           0.0          0.0          0.0          0.0          0.0          0.0
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A INVERSE                                                                                                PAGE 43
          101        102        103        104        105        106        107        108        109        110
101   1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102   0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103   0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
104   0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0
105   0.0        0.0        0.0        0.0        1.11986    0.11986    0.45320    1.11986    1.11986    1.11986
106   0.0        0.0        0.0        0.0        1.11986    1.11986    0.45320    1.11986    1.11986    1.11986
107   0.0        0.0        0.0        0.0        1.11986    1.11986    1.45320    1.11986    1.11986    1.11986
108   0.0        0.0        0.0        0.0        0.47224    0.47224    0.59580    1.47224    0.47224    0.47224
109   0.0        0.0        0.0        0.0       -0.18702   -0.18702   -0.07568   -0.18702    0.81298   -0.18702
110   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
111   0.0        0.0        0.0        0.0        0.00071    0.00071    0.00029    0.00071    0.00071    0.00071
112   0.0        0.0        0.0        0.0        0.11034    0.11034    0.04465    0.11034    0.11034    0.11034
113   0.0        0.0        0.0        0.0        0.05572    0.05572    0.02255    0.05572    0.05572    0.05572
114   0.0        0.0        0.0        0.0        0.01412    0.01412    0.00571    0.01412    0.01412    0.01412
115   0.0        0.0        0.0        0.0        0.05599    0.05599    0.02266    0.05599    0.05599    0.05599
116   0.0        0.0        0.0        0.0       -0.16535   -0.16535   -0.06692   -0.16535   -0.16535    0.83465
117   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
118   0.0        0.0        0.0        0.0       -1.69617   -1.69617   -2.87892   -1.69617   -1.69617   -1.69617
119   0.0        0.0        0.0        0.0       -1.69617   -1.69617   -2.87892   -1.69617   -1.69617   -1.69617
120   0.0        0.0        0.0        0.0       -1.69617   -1.69617   -2.87892   -1.69617   -1.69617   -1.69617
121   0.0        0.0        0.0        0.0       -2.27834   -2.27834   -3.11452   -2.27834   -2.27834   -2.27834
122   0.0        0.0        0.0        0.0        0.44286    0.44286    0.17922    0.44286    0.44286    0.44286
123   0.0        0.0        0.0        0.0       -0.00369   -0.00369   -0.00149   -0.00369   -0.00369   -0.00369
124   0.0        0.0        0.0        0.0        0.00107    0.00107    0.00043    0.00107    0.00107    0.00107
125   0.0        0.0        0.0        0.0       -0.17227   -0.17227   -0.06972   -0.17227   -0.17227   -0.17227
126   0.0        0.0        0.0        0.0        0.03034    0.03034    0.01228    0.03034    0.03034    0.03034
127   0.0        0.0        0.0        0.0        0.01686    0.01686    0.00682    0.01686    0.01686    0.01686
128   0.0        0.0        0.0        0.0       -0.17006   -0.17006   -0.06882   -0.17006   -0.17006   -0.17006
129   0.0        0.0        0.0        0.0        0.13931    0.13931    0.05638    0.13931    0.13931    0.13931
130   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
144   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
145   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
146   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
147   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
148   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
149   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
150   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
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A INVERSE                                                                                             PAGE 44
                101          102          103          104          105          106          107          108          109          110
 151     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 152     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 153     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 154     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 155     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 156     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 157     0.0          0.0          0.0          0.0          1.11986      1.11986      0.45320      1.11986      1.11986      1.11986
 158     0.0          0.0          0.0          0.0         -1.69617     -1.69617     -2.87892     -1.69617     -1.69617     -1.69617
 159     0.0          0.0          0.0          0.0         -0.18702     -0.18702     -0.07568     -0.18702      0.81298     -0.18702
 160     0.0          0.0          0.0          0.0          0.44286      0.44286      0.17922      0.44286      0.44286      0.44286
```

PAGE 45

A INVERSE

	111	112	113	114	115	116	117	118	119	120
1	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
2	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
3	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
4	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000	0.0
5	0.0	-0.00000	0.0	-0.00000	0.0	-0.00000	0.0	-0.00000	-0.00000	0.0
6	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
7	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
8	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
9	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
10	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
11	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000	0.0
12	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
15	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
16	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
17	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
18	-0.00000	-0.00000	0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
19	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
20	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000	0.0
21	-0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
22	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
23	-0.00000	-0.00000	0.00000	-0.00000	0.00000	-0.00000	0.0	-0.00000	-0.00000	0.0
24	0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	0.00000	0.00000	0.0
25	-0.00000	0.00000	-0.00000	0.00000	0.00000	0.00000	0.0	0.00000	0.00000	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
28	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
29	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
32	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0	0.00000	0.00000	0.0
33	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0	0.00000	0.00000	0.0
34	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
35	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
36	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.0	0.00000	0.00000	0.0
37	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
38	0.00000	-0.00000	-0.00000	-0.00000	0.00000	0.0	0.0	0.00000	0.00000	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
41	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
42	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
43	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
44	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
45	0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	0.0	0.00000	0.00000	0.0
46	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000	0.0	0.00000	0.00000	0.0
47	-0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
48	0.0	0.0	-0.00000	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000	0.0
49	-0.00000	0.00000	0.00000	0.00000	-0.00000	0.00000	0.0	-0.00000	-0.00000	0.0
50	0.0	-0.00000	0.0	-0.00000	0.00000	-0.00000	0.0	0.00000	0.00000	0.0

```
                                                                                                    PAGE  47
A INVERSE
         111        112        113        114        115        116        117        118        119        120
101    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
104    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
105    1.11986   -1.11986   -1.11986    1.09635    0.65723    0.0        0.0        0.0        0.0        0.0
106    1.11986   -1.11986   -1.11986    1.09635    0.65723    0.0        0.0        0.0        0.0        0.0
107    1.11986   -1.11986   -1.11986    1.09635    0.65723    0.0        0.0        0.0        0.0        0.0
108    0.47224   -0.47224   -0.47224    0.46232    0.61715    0.0        0.0        0.0        0.0        0.0
109   -0.18702    0.18702    0.18702   -0.18309   -0.10976    0.0        0.0        0.0        0.0        0.0
110    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
111    1.00071   -0.00071   -0.00071    0.05069    0.01302    0.0        0.0        0.0        0.0        0.0
112    0.11034    0.88966   -0.11034   -0.80198   -0.16473    0.0        0.0        0.0        0.0        0.0
113    0.05572   -0.05572    0.94428    0.03555    0.02791    0.0        0.0        0.0        0.0        0.0
114    0.01412   -0.01412   -0.01412    1.01382    0.26047    0.0        0.0        0.0        0.0        0.0
115    0.05599   -0.05599   -0.05599    0.05482    1.03286    0.0        0.0        0.0        0.0        0.0
116    0.83465   -0.83465   -0.83465    0.81712    0.14984    1.00000    0.0        0.0        0.0        0.0
117    0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0
118   -1.69617    1.69617    1.69617   -3.46851    1.70899   -0.00000    0.0        1.00000    0.0        0.0
119   -1.69617    1.69617    1.69617   -3.46851    1.70899   -0.00000    0.0        1.00000    1.00000    0.0
120   -1.69617    1.69617    1.69617   -3.46851    1.70899   -0.00000    0.0        1.00000    1.00000    1.00000
121   -2.27834    2.27834    2.27834   -2.23050    1.82325    0.0        0.0        0.0        0.0        0.0
122    0.44286   -0.44286   -0.44286    0.43356    0.25991   -0.00000    0.0        0.0        0.0        0.0
123   -0.00369    0.00369    0.00369   -0.26520   -0.06813    0.00000    0.0        0.0        0.0        0.0
124    0.00107   -0.00107   -0.00107    0.07700    0.01978   -0.00000    0.0        0.0        0.0        0.0
125   -0.17227    0.17227    0.17227    1.45367    0.30801    0.00000    0.0        0.0        0.0        0.0
126    0.03034   -0.03034   -0.03034    0.02970    0.01780   -0.00000    0.0        0.0        0.0        0.0
127    0.01686   -0.01686   -0.01686    0.01650    0.31096   -0.00000    0.0        0.0        0.0        0.0
128   -0.17006    0.17006    0.17006   -0.16649   -0.09981    0.00000    0.0        0.0        0.0        0.0
129    0.13931   -0.13931   -0.13931   -1.67157   -0.37417   -0.00000    0.0        0.0        0.0        0.0
130    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
144    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
145    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
146    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
147    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
148    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
149    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
150    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
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A INVERSE                                                                    PAGE 46
            111         112         113         114         115         116         117         118         119         120
  51    0.00000    -0.00000    -0.00000    -0.00000     0.0        -0.00000     0.0         0.00000     0.00000     0.0
  52    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  53   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  54   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  55   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  56   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  57    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0         0.00000     0.00000     0.0
  58    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  59    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  60    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  61    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0         0.00000     0.00000     0.0
  62    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  63   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  64   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  65    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  66    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  67    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  68    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  69    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  70    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  71    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0         0.00000     0.00000     0.0
  72   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  73    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  74    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  75    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  76    0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000     0.0        -0.00000    -0.00000     0.0
  77    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  78   -0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.0         0.00000     0.00000     0.0
  79    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  80    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  81   -0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0        -0.00000    -0.00000     0.0
  82   -0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0        -0.00000    -0.00000     0.0
  83   -0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0        -0.00000    -0.00000     0.0
  84    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  85    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  86    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  87    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  88    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  89    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  90    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  91    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  92    0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0         0.00000     0.00000     0.0
  93    0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0         0.00000     0.00000     0.0
  94    0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0         0.00000     0.00000     0.0
  95    0.00000     0.00000     0.00000    -0.00000     0.00000    -0.00000     0.0         0.00000     0.00000     0.0
  96    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  97    0.00000    -0.00000    -0.00000     0.00000    -0.00000     0.00000     0.0         0.00000     0.00000     0.0
  98    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  99    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 100    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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A INVERSE                                                                                    PAGE 48
                111            112            113            114            115           116            117            118            119            120
151       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
152       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
153       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
154       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
155       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
156       0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0            0.0
157        1.11986      -1.11986       -1.11986        1.09635        0.65723       -0.00000        0.0           -0.00000       -0.00000        0.0
158       -1.69617       1.69617        1.69617       -3.46851        1.70899        0.00000        0.0            1.00000        1.00000        0.0
159       -0.18702       0.18702        0.18702       -0.18309       -0.10976        0.00000        0.0           -0.00000       -0.00000        0.0
160        0.44286      -0.44286       -0.44286        0.43356        0.25991       -0.00000        0.0           -0.00000       -0.00000        0.0
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A INVERSE                                                                                                                         PAGE 49
               121           122           123           124           125           126           127           128           129           130
   1      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   2      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   3      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   4       0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
   5      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   6      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   7      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   8      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
   9      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  10      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  11       0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  12      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  13       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  14      -0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  15      -0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  16      -0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  17      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  18      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  19      -0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  20       0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  21      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  22      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  23      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  24       0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  25      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  26       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  27       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  28       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  29       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  30       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  31       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  32      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  33      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  34       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  35       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  36      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  37       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  38      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  39       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  40       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  41       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  42       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  43       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  44       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  45      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  46      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  47       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  48      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
  49       0.00000       0.0          -0.00000      -0.00000       0.00000       0.00000       0.0           0.0           0.0           0.0
  50      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.0           0.0           0.0           0.0
```

```
A INVERSE                                                                                                                  PAGE 50
            121          122          123          124          125          126          127          128          129          130
 51   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 52    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 53    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 54    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 55    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 56    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 57   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 58    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 59    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 60   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 61   -0.00000     -0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 62   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 63    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 64    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 65    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 66   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 67   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 68   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 69   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 70   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 71   -0.00000     -0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 72    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 73   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 74   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 75   -0.00000      0.0         -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 76   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 77    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 78    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 79    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 80    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 81   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 82   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 83   -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
 84    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 85    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 86    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 87    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 88    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 89    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 90    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 91    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 92   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 93   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 94   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 95    0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 96    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 97   -0.00000      0.00000      0.00000      0.00000     -0.00000     -0.00000      0.0          0.0          0.0          0.0
 98    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 99    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
100    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

```
A INVERSE                                                                                    PAGE 51
            121          122          123          124          125          126          127          128          129          130
101     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118     1.00000      1.00000      1.00000      1.00000     -1.00000     -1.00000      0.0          0.0          0.0          0.0
119     1.00000      1.00000      1.00000      1.00000     -1.00000     -1.00000      0.0          0.0          0.0          0.0
120     1.00000      1.00000      1.00000      1.00000     -1.00000     -1.00000      0.0          0.0          0.0          0.0
121     1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122     0.00000      1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123    -0.00000      0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
124     0.00000      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
125    -0.00000      0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0
126     0.00000      0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0
127     0.00000      0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0
128    -0.00000      0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0
129     0.00000      0.0          1.00000      1.00000     -1.00000     -1.00000      0.0          0.0          1.00000      0.0
130     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
131     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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A INVERSE                                                                                                           PAGE 53
               131           132           133           134           135           136           137           138           139           140
   1      0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000
   2      0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000
   3      0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000       0.0           0.0           0.0           0.00000
   4     -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.0           0.0           0.0          -0.00000
   5      0.0           0.0          -0.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0
   6     -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000
   7     -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000
   8     -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000
   9     -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000
  10     -0.00000      -0.00000      -0.00000      -0.00000       0.00000      -0.00000       0.0           0.0           0.0           0.00000
  11      0.00000       0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  12      0.0           0.0          -0.00000       0.0           0.00000       0.0           0.0           0.0           0.0           0.00000
  13      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  14      0.00000       0.00000      -0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  15      0.00000       0.00000      -0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  16      0.00000       0.00000      -0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  17     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000       0.00000
  18      0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  19     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000
  20      0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  21     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  22     -0.00000      -0.00000      -0.00000      -0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  23      0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  24      0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000
  25      0.00000       0.00000      -0.00000       0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000      -0.00000
  26      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  27     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  28     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  29     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  30      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  31     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  32      0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  33      0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  34     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  35     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  36      0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  37     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  38      0.00000       0.00000       0.00000      -0.00000       0.0           0.00000       0.00000      -0.00000      -0.00000       0.00000
  39      0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  40     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  41     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  42     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  43     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  44     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  45      0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  46      0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  47     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  48      0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
  49     -0.00000      -0.00000      -0.00000       0.00000      -0.00000      -0.00000      -0.00000       0.00000       0.00000      -0.00000
  50      0.00000       0.00000       0.00000      -0.00000       0.00000       0.00000       0.00000      -0.00000      -0.00000       0.00000
```

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A INVERSE

               121          122          123          124          125          126          127          128          129          130     PAGE 52
151   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
152   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
153   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
151   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
155   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
156   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
157   0.00000      0.0         -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
158   1.00000      1.00000      1.00000      1.00000     -1.00000     -1.00000      0.0          0.0          0.0          0.0
159   0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
160  -0.00000      1.00000     -0.00000     -0.00000      0.00000      0.00000      0.0          0.0          0.0          0.0
```

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A INVERSE                                                                                              PAGE 54

              131         132         133         134         135         136         137         138         139         140
 51     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 52     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 54    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 55    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 56     0.0         0.0         0.00000     0.00000    -0.00000     0.0        -0.00000     0.00000     0.00000     0.00000
 57     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 58     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 61     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 62     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 63    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 64    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.0
 65     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 66     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 67     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 68     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 69     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000     0.00000
 70     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 71    -0.00000    -0.00000     0.00000    -0.00000     0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000
 72     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 73     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 74     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 75     0.00000     0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 76     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 77     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 79     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 82     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 83     0.00000     0.00000     0.00000    -0.00000     0.00000     0.00000     0.00000    -0.00000    -0.00000    -0.00000
 84     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 90     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 93    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 94    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 95    -0.00000    -0.00000    -0.00000     0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000     0.00000
 96     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 97    -0.00000    -0.00000     0.0        -0.00000    -0.00000    -0.00000    -0.00000     0.00000     0.00000    -0.00000
 98     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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  INVERSE                                                                                                                  PAGE 55
              131          132          133          134          135          136          137          138          139          140
101   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131    1.76874      0.76874      0.70369      1.76874      1.76874      1.76874      1.76874     -1.76874     -1.76874      0.12551
132    1.76874      1.76874      0.70269      1.76874      1.76874      1.76874      1.76874     -1.76874     -1.76874      0.12551
133    1.76874      1.76874      1.70369      1.76874      1.76874      1.76874      1.76874     -1.76874     -1.76974      0.12551
134    0.66230      0.66230      0.66135      1.66230      0.66230      0.66230      0.66230     -0.66230     -0.66230      0.04700
135    0.11530      0.11530      0.04587      0.11530      1.11530      0.11530      0.11530     -0.11530     -0.11530      0.00818
136   0.0          0.0          0.0          0.0          0.0           1.00000     0.0          0.0          0.0          0.0
137   -0.00100     -0.00100     -0.00040     -0.00100     -0.00100     -0.00100      0.99900      0.00100      0.00100      0.00793
138    0.00727      0.00727      0.00289      0.00727      0.00727      0.00727      0.00727      0.99273     -0.00727     -0.05764
139    0.00060      0.00060      0.00024      0.00060      0.00060      0.00060      0.00060     -0.00060      0.99940     -0.00476
140   -0.12499     -0.12499     -0.04973     -0.12499     -0.12499     -0.12499     -0.12499      0.12499      0.12499      0.99113
141   -0.10612     -0.10612     -0.04222     -0.10612     -0.10612     -0.10612     -0.10612      0.10612      0.10612     -0.00753
142   -0.00887     -0.00887     -0.00353     -0.00887     -0.00887      0.99113      0.99113     -0.99113     -0.99113      0.07033
143   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144   -5.12932     -5.12932     -4.98801     -5.12932     -5.12932     -5.12932     -5.12932      5.12932      5.12932     -2.96149
145   -5.12932     -5.12932     -4.98801     -5.12932     -5.12932     -5.12932     -5.12932      5.12932      5.12932     -2.96149
146   -5.12932     -5.12932     -4.98801     -5.12932     -5.12932     -5.12932     -5.12932      5.12932      5.12932     -2.96149
147   -5.65162     -5.65162     -5.19581     -5.65162     -5.65162     -5.65162     -5.65162      5.65162      5.65162     -0.40104
148    0.19764      0.19764      0.07863      0.19764      0.19764      0.19764      0.19764     -0.19764     -0.19764      0.01402
149    0.32310      0.32310      0.12855      0.32310      0.32310      0.32310      0.32310     -0.32310     -0.32310     -2.56207
150    0.00156      0.00156      0.00062      0.00156      0.00156      0.00156      0.00156     -0.00156     -0.00156     -0.01240
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                                                                                                                       PAGE 56
A INVERSE
             131          132          133          134          135          136          137          138          139          140
151      1.17835      1.17835      0 46881      1.17835      1.17835      1.17835      1.17835     -1.17835     -1.17835     -1.65992
152      0.00354      0.00354      0.00141      0.00354      0.00354      0.00354      0.00354     -0.00354     -0.00354      0.00025
153     -0.00199     -0.00199     -0.00079     -0.00199     -0.00199     -0.00199     -0.00199      0.00199      0.00199     -0.00014
154      0.64789      0.64789      0.25776      0.64789      0.64789      0.64789      0.64789     -0.64789     -0.64789      0.04597
155     -0.85369     -0.85369     -0.33964     -0.85369     -0.85369     -0.85369     -0.85369      0.85369      0.85369     -0.91455
156      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
157      1.76874      1.76874      0.70369      1.76874      1.76874      1.76874      1.76874     -1.76874     -1.76874      0.12551
158     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000     -0.00000      0.00000      0.00000     -0.00000
159      0.11530      0.11530      0.04587      0.11530      1.11530      0.11530      0.11530     -0.11530     -0.11530      0.00818
160      0.19764      0.19764      0.07863      0.19764      0.19764      0.19764      0.19764     -0.19764     -0.19764      0.01402
```

A INVERSE

	141	142	143	144	145	146	147	148	149	150
1	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
2	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
3	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
4	0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	-0.00000	-0.00000
5	0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	0.00000
6	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
7	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
8	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
9	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
10	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
11	0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	-0.00000	-0.00000
12	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
15	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
16	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
17	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
18	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
19	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
20	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	-0.00000	-0.00000
21	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	-0.00000
22	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
23	-0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	0.00000	0.00000
24	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	-0.00000	-0.00000
25	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
28	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
29	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
32	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
33	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
34	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
35	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
36	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
37	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
38	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
41	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
42	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
43	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
44	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
45	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
46	0.0	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
47	0.0	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
48	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000
49	-0.00000	0.0	0.0	0.0	0.0	0.0	0.00000	0.0	0.00000	-0.00000
50	0.00000	0.0	0.0	0.0	0.0	0.0	-0.00000	0.0	-0.00000	0.00000

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A INVERSE                                                                                    PAGE 58
            141          142          143          144          145          146          147          148          149          150
  51    0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000
  52    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  53    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  54    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  55    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  56    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  57   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  58    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  59    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  60   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  61    0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  62   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  63    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  64    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  65    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  66   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  67   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  68   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  69    0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  70   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  71    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  72   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  73   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  74   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  75   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  76   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  77    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  78    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  79    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  80    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  81   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  82   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  83   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  84    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  85    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  86    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  87    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  88    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  89    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  90    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  91    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  92    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000
  93    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000
  94    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000
  95    0.00000      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.00000      0.00000
  96    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  97   -0.00000      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0         -0.00000     -0.00000
  98    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  99    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 100    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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A INVERSE                                                                                          PAGE 59
             141          142          143          144          145          146          147          148          149          150
101   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131   0.83763      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
132   0.83763      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
133   0.83763      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
134   0.70365      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -0.00000
135   0.05461      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -0.00000
136   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137   0.00895      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
138  -0.06506      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.0          0.00000
139  -0.00537      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.0          0.00000
140   1.11859      0.0          0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
141   0.94974      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.0          0.00000
142   0.07937      1.00000      0.0          0.0          0.0          0.0         -0.00000      0.0          0.0         -0.00000
143   0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
144  -1.35551      0.0          0.0          1.00000      0.0          0.0          1.00000      1.00000      1.00000      1.00000
145  -1.35551      0.0          0.0          1.00000      1.00000      0.0          1.00000      1.00000      1.00000      1.00000
146  -1 35551      0.0          0.0          1.00000      1.00000      1.00000      1.00000      1.00000      1.00000      1.00000
147   1.45643      0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.00000
148   0.09360      0.0          0.0          0.0          0.0          0.0          0.00000      1.00000      0.0         -0.00000
149  -2.89155      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          1.00000      0.00000
150  -0.01399      0.0          0.0          0.0          0.0          0.0          0.00000      0.0          0.0          1.00000
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A INVERSE                                                                                  PAGE 60

           141        142        143        144        145        146        147        148        149        150
151   -1.49547   0.0        0.0        0.0        0.0        0.0        0.00000    0.0        0.0        0.00000
152    0.00168   0.0        0.0        0.0        0.0        0.0        0.00000    0.0        0.0        0.0
153    0.01782   0.0        0.0        0.0        0.0        0.0       -0.00000    0.0        0.0        0.0
154    0.30682   0.0        0.0        0.0        0.0        0.0        0.00000    0.0        0.0       -0.00000
155   -1.41007   0.0        0.0        0.0        0.0        0.0       -0.00000    0.0        1.00000    1.00000
156    0.0       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
157    0.83763   0.0        0.0        0.0        0.0        0.0        0.00000    0.0        0.00000   -0.00000
158    0.00000   0.0        0.0        0.0        0.0        0.0        0.00000    0.0       -0.00000   -0.00000
159    0.05461   0.0        0.0        0.0        0.0        0.0       -0.00000    0.0        0.00000   -0.00000
160    0.09360   0.0        0.0        0.0        0.0        0.0        0.00000    1.00000    0.00000   -0.00000
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A INVERSE                                                                                          PAGE 61
              151          152          153          154          155          156          157          158          159          160
   1      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   2      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   3      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   4     -0.00000      0.0          0.0          0.0         -0.00000      0.0          0.00000      0.00000      0.0          0.0
   5      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
   6      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   7      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   8      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
   9      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  10      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  11     -0.00000      0.0          0.0          0.0         -0.00000      0.0          0.00000      0.00000      0.0          0.0
  12      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  13      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  14      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  15      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  16      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  17      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  18      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  19      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  20     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  21      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  22      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000     -0.00000      0.0          0.0
  23      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  24     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  25      0.00000      0.0          0.0          0.0          0.00000      0.0         -0.00000      0.00000      0.0          0.0
  26      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  27      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  28      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  29      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  30      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  31      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  32     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  33     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  34      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  35      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  36     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  37      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  38     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  39      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  40      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  41      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  42      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  43      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  44      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  45     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  46     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  47      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  48     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
  49      0.00000      0.0          0.0          0.0          0.00000      0.0          0.00000     -0.00000      0.0          0.0
  50     -0.00000      0.0          0.0          0.0         -0.00000      0.0         -0.00000      0.00000      0.0          0.0
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 A INVERSE                                                                                                PAGE 62
              151          152          153          154          155          156          157          158          159          160
  51    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000      0.00000     0.0          0.0
  52     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  53     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  54     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  55     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  56     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  57    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000      0.00000     0.0          0.0
  58     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  59     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  60    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  61    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000      0.00000     0.0          0.0
  62    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  63     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  64     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  65     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  66    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  67    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  68    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  69    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  70    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000     -0.00000     0.0          0.0
  71    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000      0.00000     0.0          0.0
  72     0.00000     0.0          0.0          0.0          0.00000     0.0         -0.00000      0.00000     0.0          0.0
  73    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000     -0.00000     0.0          0.0
  74    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000     -0.00000     0.0          0.0
  75    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000     -0.00000     0.0          0.0
  76    -0.00000     0.0          0.0          0.0         -0.00000     0.0          0.00000     -0.00000     0.0          0.0
  77     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  78     0.00000     0.0          0.0          0.0          0.00000     0.0         -0.00000      0.00000     0.0          0.0
  79     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  80     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  81    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  82    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  83    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000     -0.00000     0.0          0.0
  84     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  85     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  86     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  87     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  88     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  89     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  90     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  91     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  92     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  93     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  94     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  95     0.00000     0.0          0.0          0.0          0.00000     0.0          0.00000      0.00000     0.0          0.0
  96     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  97    -0.00000     0.0          0.0          0.0         -0.00000     0.0         -0.00000      0.00000     0.0          0.0
  98     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
  99     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
 100     0.0         0.0          0.0          0.0          0.0         0.0          0.0          0.0         0.0          0.0
```

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A INVERSE                                                                                    PAGE 63
               151          152          153          154          155          156          157          158          159          160
101     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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A INVERSE                                                                                          PAGE 64

            151         152         153         154         155         156         157         158         159         160
151      1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152      0.00000     1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     -0.00000     0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0
154      0.00000     0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0
155     -1.00000     0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0
156      0.0         0.0         0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0
157      0.00000     0.0         0.0         0.0         0.00000     0.0         1.00000    -0.00000     0.0         0.0
158     -0.00000     0.0         0.0         0.0        -0.00000     0.0         0.00000     1.00000     0.0         0.0
159     -0.00000     0.0         0.0         0.0         0.00000     0.0         0.00000    -0.00000     1.00000     0.0
160      0.00000     0.0         0.0         0.0         0.00000     0.0         0.00000    -0.00000     0.0         1.00000
```

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B MATRIX
                                                                                                                                     PAGE  1
              1            2            3            4            5            6            7            8            9           10
 1      1.00000      1.00000          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 2          0.0          0.0     -1.00000          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 3          0.0          0.0          0.0     -1.00000          0.0          0.0          0.0          0.0          0.0          0.0
 4          0.0          0.0          0.0          0.0      6.40000      0.00040     -0.00070          0.0          0.0          0.0
 5          0.0          0.0          0.0          0.0     -0.95000          0.0     -0.02200     -0.02000          0.0          0.0
 6          0.0          0.0          0.0          0.0      5.60000      0.00030          0.0          0.0          0.0          0.0
 7          0.0          0.0          0.0          0.0     -0.26000      0.00001     -0.00500          0.0     -0.00009          0.0
 8          0.0          0.0          0.0          0.0     -2.80000      0.00005     -0.00007          0.0          0.0          0.0
 9          0.0          0.0          0.0          0.0     -0.75000     -0.00014          0.0          0.0          0.0          0.0
10          0.0          0.0          0.0          0.0     -3.02000      0.00015          0.0          0.0          0.0          0.0
11          0.0          0.0          0.0          0.0      1.17000      0.00013          0.0          0.0          0.0      0.86000
12          0.0          0.0     -1.00000          0.0          0.0          0.0          0.0          0.0          0.0          0.0
13     -1.00000     -1.00000          0.0      1.00000          0.0          0.0          0.0          0.0          0.0          0.0
14          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
15          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
16          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
17          0.0          0.0          0.0          0.0      5.30000          0.0          0.0          0.0          0.0          0.0
18          0.0          0.0          0.0          0.0     -0.23000          0.0          0.0          0.0          0.0          0.0
19          0.0          0.0          0.0          0.0      1.50000          0.0      0.00900      0.14330          0.0          0.0
20          0.0          0.0          0.0          0.0      0.22000          0.0     -0.30000          0.0          0.0          0.0
21          0.0          0.0          0.0          0.0     -1.95000      0.00004      0.00090          0.0          0.0          0.0
22          0.0          0.0          0.0          0.0          0.0      0.00154          0.0          0.0          0.0          0.0
23          0.0          0.0          0.0          0.0      9.47262          0.0          0.0          0.0          0.0          0.0
24          0.0          0.0          0.0          0.0     18.86770      0.00200          0.0          0.0          0.0          0.0
25          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0     -1.81867
26          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
27          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
28          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
29          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
30          0.0          0.0          0.0          0.0          0.0     -0.01790          0.0          0.0          0.0          0.0
31          0.0          0.0          0.0          0.0    -14.00000     -0.15200      0.41990    219.61000          0.0          0.0
32          0.0          0.0          0.0          0.0   -305.00000     -1.50000          0.0          0.0          0.0          0.0
33          0.0          0.0          0.0          0.0    -67.00000     -0.19000          0.0          0.0          0.0          0.0
34          0.0          0.0          0.0          0.0     11.40000          0.0          0.0          0.0          0.0          0.0
35          0.0          0.0          0.0          0.0      1.79000     -0.00008          0.0          0.0          0.0          0.0
36          0.0          0.0          0.0          0.0      5.57000     -0.00170          0.0          0.0          0.0          0.0
37          0.0          0.0          0.0          0.0     -0.97000      0.00090          0.0          0.0          0.0          0.0
38          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
39          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
40          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
41          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
42          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
43          0.0          0.0          0.0          0.0   -217.70000      0.04619          0.0          0.0          0.0          0.0
44          0.0          0.0          0.0          0.0    243.51800     -0.15940          0.0          0.0          0.0          0.0
45          0.0          0.0          0.0          0.0  18646.00000     31.59390          0.0     -2.68620          0.0          0.0
46          0.0          0.0          0.0          0.0  -2868.00000     -0.08289          0.0          0.0          0.0          0.0
47          0.0          0.0          0.0          0.0     18.94400          0.0          0.0          0.0          0.0          0.0
48          0.0          0.0          0.0          0.0      1.42320      0.00011          0.0          0.0          0.0          0.0
49          0.0          0.0          0.0          0.0     -0.54500      0.00209          0.0          0.0          0.0          0.0
50          0.0          0.0          0.0          0.0     -9.53800      0.00154          0.0          0.0          0.0          0.0
```

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B MATRIX                                                                                                          PAGE  2
           1            2            3            4           5           6          7          8          9           10
  51   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  52   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  53   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  54   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  55   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  56   0.0          0.0          0.0          0.0        51.87540   0.00482    0.0       0.0       0.0          0.0
  57   0.0          0.0          0.0          0.0        76.73080   0.00500    0.01280   0.0       0.0          0.0
  58   0.0          0.0          0.0          0.0        12.91970   0.00200   -0.00866   0.36220   0.0          0.0
  59   0.0          0.0          0.0          0.0        -2.40000   0.00090    0.0       0.0       0.0          0.0
  60   0.0          0.0          0.0          0.0      -114.05600  -0.12890    0.08698   0.0       0.0          0.0
  61   0.0          0.0          0.0          0.0       -12.60000  -0.00030    0.00465   0.0       0.0          0.0
  62   0.0          0.0          0.0          0.0        44.63000   0.0        0.0       0.0       0.0          0.0
  63   0.0          0.0          0.0          0.0        21.35930  -0.00001    0.0       0.0       0.0          0.0
  64   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  65   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  66   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  67   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  68   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  69   0.0          0.0          0.0          0.0       594.33200   0.05700    0.0       0.0       0.0          0.0
  70   0.0          0.0          0.0          0.0       283.47400   0.02000   10.68580   0.0       0.0          0.0
  71   0.0          0.0          0.0          0.0        67.43280   0.00700    0.00260  -0.41630   0.0          0.0
  72   0.0          0.0          0.0          0.0         9.34800   0.00100    0.0       0.0       0.0          0.0
  73   0.0          0.0          0.0          0.0        69.58300   0.0        0.54000   0.0       0.0          0.0
  74   0.0          0.0          0.0          0.0         5.67220   0.00060    0.00200   0.0       0.0          0.0
  75   0.0          0.0          0.0          0.0       125.69400   0.00470    0.0       0.0       0.0          0.0
  76   0.0          0.0          0.0          0.0       156.22500   0.01400    0.0       0.0       0.0          0.0
  77   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  78   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  79   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  80   0.0          0.0          0.0          0.0         0.0       0.01800    0.0       0.0       0.0          0.0
  81   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  82   0.0          0.0          0.0          0.0        52.63000   0.00700   -0.07900   0.0       0.0          0.0
  83   0.0          0.0          0.0          0.0         0.0      -0.01250    0.13700   0.0       0.0          0.0
  84   0.0          0.0          0.0          0.0         7.12000   0.00300    0.01860   0.04016   0.0          0.0
  85   0.0          0.0          0.0          0.0       -16.00000  -0.00120    0.0       0.0       0.0          0.0
  86   0.0          0.0          0.0          0.0       -43.00000  -0.00080    0.0       0.0       0.0          0.0
  87   0.0          0.0          0.0          0.0        -3.40000   0.0        0.0       0.0       0.0          0.0
  88   0.0          0.0          0.0          0.0        26.58000   0.0        0.0       0.0       0.0          0.0
  89   0.0          0.0          0.0          0.0       -20.75990  -0.00096    0.0       0.0       0.0          0.0
  90   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  91   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  92   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  93   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  94   0.0          0.0          0.0          0.0         0.0       0.0        0.0       0.0       0.0          0.0
  95   0.0          0.0          0.0          0.0       156.43800   0.01360    0.0       0.0       0.0          0.0
  96   0.0          0.0          0.0          0.0       -81.74860  -0.01940    0.12780   0.0       0.0          0.0
  97   0.0          0.0          0.0          0.0       154.43100   0.00559    0.05390   0.06294   0.0          0.0
  98   0.0          0.0          0.0          0.0        15.34310   0.00147    0.0       0.0       0.0          0.0
  99   0.0          0.0          0.0          0.0       102.82700   0.0        0.05270   0.0       0.0          0.0
 100   0.0          0.0          0.0          0.0         5.31752   0.00076    0.00300   0.0       0.0          0.0
```

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                                                                                                                   PAGE  3
B MATRIX
                  1            2            3            4             5            6            7            8            9           10
101     0.0          0.0          0.0          0.0            36.34000      0.00290      0.0          0.0          0.0          0.0
102     0.0          0.0          0.0          0.0            10.18540      0.00275      0.0          0.0          0.0          0.0
103     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
104     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
105     0.0          0.0          0.0          0.0             0.0          0.00160      0.0          0.0          0.0          0.0
106     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
107     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
108     0.0          0.0          0.0          0.0           166.48200      0.01869      0.0          0.0          0.0          0.0
109     0.0          0.0          0.0          0.0            49.42000      0.01000      0.0          0.0          0.0          0.0
110     0.0          0.0          0.0          0.0           131.90500      0.0          0.0         -0.04806      0.0          0.0
111     0.0          0.0          0.0          0.0            -0.34000      0.00300      0.0          0.0          0.0          0.0
112     0.0          0.0          0.0          0.0           172.58000      0.0          0.0          0.0          0.0          0.0
113     0.0          0.0          0.0          0.0           -31.58000     -0.00300      0.0          0.0          0.0          0.0
114     0.0          0.0          0.0          0.0            88.23000      0.00028      0.0          0.0          0.0          0.0
115     0.0          0.0          0.0          0.0            74.98320      0.00400      0.0          0.0          0.0          0.0
116     0.0          0.0          0.0          0.0             0.0          0.00004      0.0          0.0          0.0          0.0
117     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
118     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
119     0.0          0.0          0.0          0.0             0.0          0.0          1.00000      0.0          0.0          0.0
120     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
121     0.0          0.0          0.0          0.0          1613.89000      0.06960      0.0          0.0          0.0          0.0
122     0.0          0.0          0.0          0.0           948.50000      0.00200     -0.00537      0.0          0.0          0.0
123     0.0          0.0          0.0          0.0           243.70000      0.00600      0.01390     -0.61889      0.0          0.0
124     0.0          0.0          0.0          0.0            -1.07000      0.00031      0.0          0.0          0.0          0.0
125     0.0          0.0          0.0          0.0           146.63800      0.0          0.01640      0.0          0.0          0.0
126     0.0          0.0          0.0          0.0           -13.10000     -0.00080      0.00300      0.0          0.0          0.0
127     0.0          0.0          0.0          0.0          -106.47900     -0.00480      0.0          0.0          0.0          0.0
128     0.0          0.0          0.0          0.0          1175.27000      0.02000      0.0          0.0          0.0          0.0
129     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
130     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
131     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
132     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
133     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
134     0.0          0.0          0.0          0.0            25.55310      0.00089      0.0          0.0          0.0          0.0
135     0.0          0.0          0.0          0.0            21.31000      0.09000      0.0          0.0          0.0          0.0
136     0.0          0.0          0.0          0.0            68.30000     -0.00075      0.0          0.22080      0.0          0.0
137     0.0          0.0          0.0          0.0             0.16300      0.00009      0.0          0.0          0.0          0.0
138     0.0          0.0          0.0          0.0            58.00000      0.00260      0.0          0.0          0.0          0.0
139     0.0          0.0          0.0          0.0            -0.01900      0.00002      0.0          0.0          0.0          0.0
140     0.0          0.0          0.0          0.0             0.65000      0.00014      0.0          0.0          0.0          0.0
141     0.0          0.0          0.0          0.0           -22.88980      0.00022      0.0          0.0          0.0          0.0
142     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
143     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
144     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
145     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
146     0.0          0.0          0.0          0.0             0.0          0.0          0.0          0.0          0.0          0.0
147     0.0          0.0          0.0          0.0           992.37900      0.05000      0.0          0.0          0.0          0.0
148     0.0          0.0          0.0          0.0           -39.08700      0.00110      0.0          0.0          0.0          0.0
149     0.0          0.0          0.0          0.0           114.20600      0.62190      0.0          0.77257      0.0          0.0
150     0.0          0.0          0.0          0.0             0.83133      0.00023      0.0          0.0          0.0          0.0
```

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B MATRIX                                                                                      PAGE  4
                 1          2          3          4          5          6          7          8          9         10
151    0.0        0.0        0.0        0.0         1.26428   0.0        0.0        0.0        0.0        0.0
152    0.0        0.0        0.0        0.0        -0.18321   0.0        0.0        0.0        0.0        0.0
153    0.0        0.0        0.0        0.0        30.49800   0.00677    0.0        0.0        0.0        0.0
154    0.0        0.0        0.0        0.0        25.73000   0.00301    0.0        0.0        0.0        0.0
155    0.0        0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
156    0.0        0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
157    0.0        0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
158    0.0        0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
159    1.00000    0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
160    0.0        0.0        0.0        0.0         0.0       0.0        0.0        0.0        0.0        0.0
```

```
B MATRIX                                                                                                                              PAGE  5
              11            12            13            14            15            16            17            18            19            20
   1   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   2   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   3   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   4   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   5   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   6   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   7   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   8   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   9   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  10   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  11   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  12   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  13   0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  14   1.00000       0.0          -1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0
  15   0.0           0.0           0.0          -1.00000       0.0           0.0           0.0           0.0           0.0           0.0
  16   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  17   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  18   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  19   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  20   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  21   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  22   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  23   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  24   0.0           0.0          -1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0
  25   0.0          -1.00000       0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0
  26  -1.00000       0.0           0.0           0.0           1.00000       1.00000       0.0           0.0           0.0           0.0
  27   0.0           0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0
  28   0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0
  29   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  30   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.31000       0.0
  31   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -34.00000      0.0
  32   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.22000
  33   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -0.02000       0.0
  34   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.00500       0.0
  35   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  36   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  37   0.0           0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0
  38   0.0           0.0           0.0           0.0          -1.00000      -1.00000       0.0           1.00000       0.0           0.0
  39   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  40   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  41   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  42   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  43   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  44   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           2.35560       0.0
  45   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           83.54180      0.0
  46   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           8.60796
  47   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.03789       0.0
  48   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.00610       0.0
  49   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  50   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
```

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B MATRIX
              11        12        13        14        15        16        17        18        19        20
 51     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 52     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 53     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 54     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 55     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 56     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 57     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 58     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 59     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 60     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 61     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 62     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 63     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 64     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 65     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 66     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 67     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 68     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 69     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 70     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 71     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 72     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 73     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 74     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 75     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 76     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 77     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 78     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 79     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 80     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 81     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 82     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 83     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 84     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 85     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 86     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 87     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 88     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 89     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 90     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 91     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 92     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 93     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 94     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 95     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 96     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 97     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 98     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 99     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
100     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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                                                                                 PAGE  7
B MATRIX
          11     12     13     14     15     16     17     18     19     20.
101     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
102     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
103     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
104     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
105     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
106     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
107     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
108     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
109     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
110     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
111     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
112     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
113     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
114     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
115     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
116     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
117     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
118     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
119     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
120     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
121     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
122     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
123     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
124     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
125     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
126     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
127     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
128     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
129     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
130     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
131     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
132     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
133     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
134     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
135     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
136     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
137     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
138     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
139     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
140     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
141     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
142     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
143     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
144     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
145     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
146     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
147     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
148     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
149     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
150     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
```

```
B MATRIX                                                                                   PAGE  8
                 11          12          13          14          15          16          17          18          19          20
 151    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 152    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 153    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 154    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 155    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 156    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 157    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 158    0.0         0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0
 159    1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 160    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

```
B MATRIX                                                                                                   PAGE  9
           21          22          23          24          25          26          27          28          29          30
  1  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  2  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  3  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  4  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  5  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  6  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  7  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  8  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  9  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 10  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 11  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 12  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 13  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 15  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 16  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 17  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 18  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 19  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 20  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 21  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 22  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 23  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 24  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 25  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 26  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 27  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 28  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 29  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 30  0.0         6.22740     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 31  0.0        58.14350     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 32  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 33  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 34  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 35  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 36  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 37  0.55580     0.08878     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 38  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 39  0.0         0.0         1.00000     1.00000     0.0        -1.00000     0.0         0.0         0.0         0.0
 40  0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0         0.0         0.0
 41  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 42  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 43  0.0         6.22786     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 44  0.0         5.41000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 45  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 46  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 47  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 48  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 49  0.0         1.20000     0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0
 50  0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0         0.0         0.0
```

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B MATRIX                                                                                        PAGE 10
               21          22          23          24          25          26          27          28          29          30
  51   0.0         0.0         -1.00000    -1.00000    0.0         0.0         0.0         0.0         0.0         0.0
  52   2.72682     0.0         0.0         0.0         0.0         0.0         1.00000     1.00000     0.0         0.0
  53   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         -1.00000    0.0
  54   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         -1.00000
  55   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  56   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  57   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  58   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  59   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  60   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  61   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  62   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  63   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         -1.00000    0.0
  64   0.0         0.0         0.0         0.0         0.0         0.0         -1.00000    -1.00000    0.0         1.00000
  65   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  66   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  67   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  68   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  69   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  70   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  71   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  72   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  73   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  74   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  75   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  76   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  77   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  78   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  79   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  80   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  81   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  82   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  83   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  84   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  85   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  86   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  87   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  88   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  89   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  90   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  91   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  92   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  93   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  94   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  95   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  96   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  97   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  98   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  99   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 100   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

B MATRIX

	21	22	23	24	25	26	27	28	29	30
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
B MATRIX                                                                                   PAGE 12
              21           22           23           24           25           26           27           28           29           30
151   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
152   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
153   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
154   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
155   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
156   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
157   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
158   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
159   0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
160   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

```
B MATRIX                                                                                                  PAGE 13
             31         32         33         34         35         36         37         38         39         40
   1    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   2    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   3    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   4    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   5    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   6    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   7    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   8    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   9    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  10    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  11    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  12    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  13    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  14    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  15    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  16    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  17    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  18    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  19    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  20    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  21    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  22    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  23    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  24    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  25    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  26    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  27    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  28    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  29    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  30    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  31    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  32    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  33    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  34    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  35    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  36    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  37    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  38    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  39    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  40    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  41    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  42    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  43    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  44    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  45    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  46    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  47    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  48    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  49    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  50    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

```
                                                                                                   PAGE 14
B MATRIX
              31         32         33         34         35         36         37         38         39         40
  51     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  52     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  53     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  54     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  55     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  56     0.0        0.0       -0.78000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  57     0.0        0.0        1.78000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  58     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  59     0.00100    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  60     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  61     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  62     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  63     0.0        1.20000    0.11000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  64     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  65     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  66     0.0        0.0        0.0        1.00000    1.00000    0.0        0.0        0.0        0.0        0.0
  67     0.0        0.0        0.0        0.0        0.0       -1.00000    0.0        0.0        0.0        0.0
  68     0.0        0.0        0.0        0.0        0.0        0.0       -1.00000    0.0        0.0        0.0
  69     0.0        0.0      -37.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  70     0.0        0.0      -15.90000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  71     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  72     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  73     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  74     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  75     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  76     0.0        0.64000   -7.57000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  77     0.0        0.0        0.0        0.0        0.0       -1.00000    0.0        0.0        0.0        0.0
  78     0.0        0.0        0.0       -1.00000   -1.00000    0.0        1.00000    0.0        0.0        0.0
  79     0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    1.00000    0.0
  80     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0       -1.00000
  81     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  82     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  83     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  84     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  85     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  86     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  87     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  88     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  89     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  90     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0       -1.00000
  91     0.0        0.0        0.0        0.0        0.0        0.0        0.0       -1.00000   -1.00000    0.0
  92     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  93     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  94     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  95     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  96     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  97     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  98     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  99     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 100     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

```
B MATRIX                                                                                        PAGE 15
               31          32          33          34          35          36          37          38          39          40
101    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
102    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
103    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
104    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
105    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
106    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
118    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

```
B MATRIX                                                                                          PAGE 16
              31          32          33          34          35          36          37          38          39          40
151     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158     0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.00000     0.0         0.0
159     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160     0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0
```

```
B MATRIX                                                                              PAGE 17
                41        42        43        44        45        46        47        48        49        50
   1   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   2   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   3   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   4   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   5   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   6   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   7   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   8   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   9   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  10   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  11   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  12   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  13   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  14   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  15   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  16   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  17   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  18   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  19   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  20   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  21   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  22   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  23   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  24   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  25   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  26   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  27   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  28   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  29   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  30   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  31   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  32   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  33   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  34   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  35   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  36   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  37   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  38   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  39   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  40   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  41   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  42   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  43   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  44   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  45   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  46   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  47   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  48   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  49   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  50   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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B MATRIX                                                                                                                        PAGE 18
           41          42          43          44          45          46          47          48          49          50
 51    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 52    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 54    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 55    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 56    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 57    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 58    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 61    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 62    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 63    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 64    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 65    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 66    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 67    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 68    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 69    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 70    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 71    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 72    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 73    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 74    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 75    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 76    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 77    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 79    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81   -1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 82    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 83    0.0         0.0         0.0       -63.05810     0.0         0.0         0.0         0.0         0.0         0.0
 84    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85    0.0         0.00090     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89    0.0         0.0         0.70041     2.18905     0.0         0.0         0.0         0.0         0.0         0.0
 90    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91   -1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92    0.0         0.0         0.0         0.0         1.00000     1.00000     0.0         0.0         0.0         0.0
 93    0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0
 94    0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0
 95    0.0         0.0         0.0        13.92630     0.0         0.0         0.0         0.0         0.0         0.0
 96    0.0         0.0         0.0         0.12784     0.0         0.0         0.0         0.0         0.0         0.0
 97    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 98    0.0         0.00409     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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                                                                                                            PAGE 19
B MATRIX
              41          42          43          44          45          46          47          48          49          50
101       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
102       0.0         0.0         0.86675     0.0         0.0         0.0         0.0         0.0         0.0         0.0
103       0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0
104       0.0         0.0         0.0         0.0        -1.00000    -1.00000     0.0         1.00000     0.0         0.0
105       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.00000     1.00000
106       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
107       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
108       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
109       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
110       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
111       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
112       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
113       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
114       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
115       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
116       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
117       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000    -1.00000
118       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
119       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
120       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
121       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
122       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
123       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
124       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
125       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
126       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
127       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
128       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
129       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
130       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
131       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
132       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
133       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
134       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
135       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
136       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
137       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
138       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
139       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
140       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
141       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
142       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
143       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
144       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
145       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
146       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
147       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
148       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
149       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
150       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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                                                                                                          PAGE 20
B MATRIX
              41           42          43          44          45          46          47          48          49          50
151    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.00000     0.0
159    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160    0.0         0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0
```

B MATRIX

PAGE 21

	51	52	53	54	55	56	57	58	59	60.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
B MATRIX                                                                                                                     PAGE 22
                  51            52            53            54            55            56            57            58            59            60
  51   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  52   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  53   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  54   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  55   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  56   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  57   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  58   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  59   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  60   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  61   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  62   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  63   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  64   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  65   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  66   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  67   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  68   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  69   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  70   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  71   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  72   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  73   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  74   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  75   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  76   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  77   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  78   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  79   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  80   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  81   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  82   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  83   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  84   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  85   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  86   0.0           0.0           0.0           0.0           1.00000       0.0           0.0           0.0           0.0           0.0
  87   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  88   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  89   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  90   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  91   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  92   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  93   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  94   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  95   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  96   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  97   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  98   0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0           0.0           0.0
  99   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
 100   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
```

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B MATRIX                                                                                                                   PAGE 23
             51            52            53            54            55            56            57            58            59            60
101   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
102   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
103   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
104   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
105   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
106  -1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
107   0.0          -1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
108   0.0           0.0           0.0           3.93015       0.0           0.0           0.0           0.0           0.0           0.0
109   0.0           0.0           0.0          -1.55769       0.0           0.0           0.0           0.0           0.0           0.0
110   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
111   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
112   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
113   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
114   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
115   0.0           0.0           0.73000     -10.24200       0.0           0.0           0.0           0.0           0.0           0.0
116  -1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
117   0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
118   0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0           0.0           0.0
119   0.0           0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0
120   0.0           0.0           0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0
121   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
122   0.0           0.0           0.0        -127.85200       0.0           0.0           0.0           0.0           0.0           0.0
123   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
124   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
125   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
126   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
127   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
128   0.0           0.0           0.0        -114.25200       1.00000       0.0           0.0           0.0           0.0           0.0
129   0.0           0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0
130   0.0           0.0           0.0           0.0           0.0          -1.00000       0.0           0.0           0.0           0.0
131   0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0
132   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       1.00000
133   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
134   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
135   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
136   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
137   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
138   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
139   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
140   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
141   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
142   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
143   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -1.00000      -1.00000
144   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
145   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
146   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
147   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
148   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
149   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
150   0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
```

```
B MATRIX                                                                                                   PAGE 24
              51           52           53           54           55           56           57           58           59           60
151    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
152    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
153    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
154    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
155    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
156    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
157    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
158    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
159    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0
160    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

B MATRIX

	61	62	63	64	65	66	67	68	69	70
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
B MATRIX                                                                                    PAGE 26
                   61          62          63          64          65          66          67          68          69          70
   51    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   52    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   53    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   54    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   55    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   56    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   57    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   58    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   59    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   60    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   61    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   62    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   63    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   64    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   65    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   66    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   67    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   68    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   69    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   70    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   71    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   72    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   73    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   74    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   75    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   76    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   77    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   78    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   79    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   80    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   81    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   82    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   83    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   84    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   85    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   86    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   87    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   88    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   89    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   90    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   91    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   92    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   93    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   94    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   95    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   96    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   97    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   98    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
   99    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  100    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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B MATRIX                                                                                                                PAGE 27
              61           62           63           64           65           66           67           68           69           70
 101   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 102   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 103   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 104   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 105   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 106   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 107   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 108   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 109   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 112   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 113   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 115   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 121   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 122   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 125   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 126   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 128   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 131   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 132  -1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 133   0.0         -1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 134   0.0          0.0          0.0          0.0          9.39006      0.0          0.0          0.0          0.0          0.0
 135   0.0          0.0          0.0          0.0          0.0         -0.03738      0.0          0.0          0.0          0.0
 136   0.0          0.0          0.0          0.0          0.0          0.12040      0.0          0.0          0.0          0.0
 137   0.0          0.0          0.00010      0.0          0.0          0.0          0.0          0.0          0.0          0.0
 138   0.0          0.0          0.0          0.0          0.0         -0.03053      0.0          0.0          0.0          0.0
 139   0.0          0.0          0.0          0.0          0.0          0.00042      0.0          0.0          0.0          0.0
 140   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 141   0.0          0.0          0.0          1.79696      3.16222      0.0          0.0          0.0          0.0          0.0
 142  -1.00000      C.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 143   0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 144   0.0          0.0          0.0          0.0          0.0          0.0          1.00000      1.00000      0.0          0.0
 145   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000      0.0
 146   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000
 147   0.0          0.0          0.0          0.0       -108.06200      0.0          0.0          0.0          0.0          0.0
 148   0.0          0.0          0.0          0.0          8.86288     -0.97194      0.0          0.0          0.0          0.0
 149   0.0          0.0          0.0          0.0          0.0          0.23835      0.0          0.0          0.0          0.0
 150   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          Q.0
```

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B MATRIX                                                                                              PAGE 28
           61         62         63         64         65         66         67         68         69         70
151   0.0        0.0        0.0        0.0        0.0        0.04750    0.0        0.0        0.0        0.0
152   0.0        0.0        0.0        0.0        0.0        0.00109    0.0        0.0        0.0        0.0
153   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
154   0.0        0.0        0.0        0.0      -10.30910    0.0        0.0        0.0        0.0        0.0
155   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0       -1.00000    0.0
156   0.0        0.0        0.0        0.0        0.0        0.0       -1.00000   -1.00000    0.0        1.00000
157   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
158   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
159   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
160   0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0
        5         0
```

```
                                                                                                            PAGE    1
A MATRIX
                1          2          3          4          5          6          7          8          9          10
  1      1.00000    0.0        0.0       -1.00000   -1.00000   -1.00000   -1.00000    1.00000    1.00000    0.0
  2     -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  3      0.0       -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
  4      0.0        0.0        0.78000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0
  5      0.0       -0.14000    0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0
  6      0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0       -2.65000
  7      0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0       -0.18000
  8      0.0       -0.23000    0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0
  9      0.0       -0.02600    0.0        0.0        0.0        0.0        0.0        0.0        1.00000   -0.08900
 10      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
 11      0.0        0.00300    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 12      0.0        0.0        0.0        0.0        0.0       -1.00000   -1.00000    1.00000    1.00000    0.0
 13      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 14      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 15      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 16      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 17      0.0        0.0       -0.08134    0.0        0.0        0.0        0.0        0.0        0.0        0.0
 18      0.0       -0.06000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 19      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        2.59512
 20      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.13600
 21      0.0       -0.22500    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 22      0.0       -0.07497    0.0        0.0        0.0        0.0        0.0        0.0        0.0       -0.25600
 23      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 24      0.0        0.11700    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 25      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 26      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 27      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 28      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 29      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 30      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 31      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 32      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 33      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 34      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 35      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 36      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 37      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 38      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 39      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 40      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 41      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 42      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 43      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 44      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 45      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 46      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 47      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 48      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 49      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 50      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

```
                                                                                   PAGE  2
A MATRIX
              1          2          3          4          5          6          7          8          9          10
 51     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 52     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 53     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 54     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 55     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 56     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 57     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 58     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 59     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 60     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 61     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 62     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 63     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 64     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 65     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 66     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 67     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 68     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 69     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 70     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 71     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 72     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 73     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 74     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 75     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 76     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 77     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 78     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 79     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 80     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 81     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 82     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 83     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 84     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 85     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 86     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 87     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 88     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 89     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 90     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 91     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 92     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 93     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 94     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 95     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 96     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 97     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 98     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 99     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
100     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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                                                                                             PAGE  3
A MATRIX
                 1          2          3          4          5          6          7          8          9         10
  101     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  102     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  103     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  104     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  105     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  106     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  107     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  108     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  109     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  110     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  111     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  112     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  113     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  114     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  115     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  116     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  117     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  118     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  119     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  120     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  121     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  122     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  123     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  124     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  125     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  126     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  127     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  128     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  129     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  130     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  131     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  132     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  133     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  134     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  135     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  136     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  137     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  138     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  139     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  140     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  141     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  142     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  143     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  144     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  145     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  146     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  147     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  148     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  149     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  150     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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                                                                                          PAGE   4
A MATRIX
           1          2          3          4          5          6          7          8          9         10
151       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
152       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
153       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
154       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
155       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
156       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
157       0.0     -1.00000      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
158       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
159       0.0        0.0        0.0        0.0     -1.00000      0.0        0.0        0.0        0.0        0.0
160       0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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A MATRIX                                                                                                                      PAGE  5
             11            12            13            14            15            16            17            18            19            20
   1  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   2  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   3  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   4  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   5  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   6  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   7  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   8  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
   9  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  10 -0.57000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  11  1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  12  0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  13  0.0           0.0           1.00000       0.0           0.0           0.0           0.0           0.0           0.0           0.0
  14  0.0           0.0           0.0           1.00000       0.0           0.0          -1.00000      -1.00000      -1.00000      -1.00000
  15  0.0           0.0           0.0          -1.00000       1.00000       0.0           0.0           0.0           0.0           0.0
  16  0.0           0.0           0.0           0.0          -1.00000       1.00000       0.0           0.0           0.0           0.0
  17  0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0           0.0
  18  0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0           0.0
  19  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000       0.0
  20  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           1.00000
  21  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  22  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  23  1.76324       0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  24  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  25  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0          -1.00000      -1.00000
  26  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  27  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  28  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  29  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  30  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  31  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  32  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  33  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  34  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  35  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  36  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  37  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  38  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  39  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  40  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  41  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  42  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  43  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  44  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  45  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  46  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  47  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  48  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  49  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
  50  0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
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                                                                                          PAGE  6
A MATRIX
            11        12        13        14        15        16        17        18        19        20
 51        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 52        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 53        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 54        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 55        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 56        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 57        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 58        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 59        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 60        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 61        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 62        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 63        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 64        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 65        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 66        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 67        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 68        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 69        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 70        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 71        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 72        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 73        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 74        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 75        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 76        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 77        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 78        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 79        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 80        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 81        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 82        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 83        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 84        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 85        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 86        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 87        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 88        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 89        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 90        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 91        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 92        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 93        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 94        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 95        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 96        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 97        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 98        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 99        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
100        0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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A MATRIX                                                                                   PAGE   7
                 11          12          13          14          15          16          17          18          19          20
 101     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 102     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 103     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 104     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 105     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 106     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 107     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 108     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 109     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 110     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 111     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 112     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 113     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 114     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 115     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 116     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 117     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 118     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 119     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 120     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 121     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 122     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 123     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 124     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 125     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 126     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 127     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 128     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 129     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 130     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 131     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 132     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 133     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 134     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 135     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 136     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 137     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 138     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 139     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 140     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 141     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 142     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 143     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 144     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 145     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 146     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 147     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 148     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 149     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 150     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                              PAGE  8
                 11          12          13          14          15          16          17          18          19          20
151    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158    0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0         0.0         0.0
159    0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160    0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0
```

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A MATRIX                                                                                                    PAGE  9
              21          22          23          24          25          26          27          28          29          30
  1     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  2     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  3     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  4     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  5     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  6     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  7     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  8     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  9     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 10     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 11     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 12     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 13     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14     1.00000     1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 15     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 16     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 17     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 18     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 19     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 20     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 21     1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 22     0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 23     0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0
 24     0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0         0.0
 25     1.00000     1.00000     0.0         0.0         1.00000     0.0         0.0         0.0         0.0         0.0
 26     0.0         0.0         0.0         0.0         0.0         1.00000     0.0         0.0         0.0         0.0
 27     0.0         0.0         0.0         0.0         0.0         0.0         1.00000     0.0         0.0        -1.00000
 28     0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     1.00000     0.0         0.0
 29     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     1.00000     0.0
 30     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         1.00000
 31     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.85316     0.0         0.0
 32     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 33     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 34     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.01000     0.0         0.0
 35     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.00200     0.0         0.0
 36     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 37     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.02761     0.0         0.0
 38     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 39     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 40     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 41     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 42     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 43     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.25000     0.0
 44     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.80999     0.0         0.0
 45     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 46     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 47     0.0         0.0         0.0         0.0         0.0         0.0         0.0        -0.08530     0.0         0.0
 48     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.00100     0.0         0.0
 49     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 50     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.26879     0.0         0.0
```

PAGE 10

A MATRIX

	21	22	23	24	25	26	27	28	29	30
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
A MATRIX                                                                                  PAGE 11
                21         22         23         24         25         26         27         28         29         30
101      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
104      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
105      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
106      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
107      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
108      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
109      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
110      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
111      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
112      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
113      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
114      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
115      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
116      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
117      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
118      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
119      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
120      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
121      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
122      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
123      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
124      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
125      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
126      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
127      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
128      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
129      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
130      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
144      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
145      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
146      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
147      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
148      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
149      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
150      0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

```
A MATRIX                                                                                               PAGE  12
                 21              22              23              24              25              26              27              28              29              30
151      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
152      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
153      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
154      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
155      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
156      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
157      0.0             0.0             0.0             0.0             0.0             0.0             0.0            -1.00000         0.0             0.0
158      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
159      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
160      0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
```

```
A MATRIX                                                                                                   PAGE 13
              31           32           33           34           35           36           37           38           39           40
  1    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  2    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  3    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  4    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  5    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  6    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  7    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  8    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  9    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 10    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 11    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 12    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 13    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 14    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 15    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 16    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 17    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 18    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 19    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 20    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 21    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 22    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 23    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 24    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 25    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 26    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 27   -1.00000     -1.00000     -1.00000      1.00000      1.00000      0.0          0.0          0.0          0.0          0.0
 28    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 29    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 30    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 31    1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 32    0.0          1.00000      0.0          0.0          0.0       -107.00000      0.0          0.0          0.0          0.0
 33    0.0          0.0          1.00000      0.0          0.0       -130.00000      0.0          0.0          0.0          0.0
 34    0.0          0.0          0.0          1.00000      0.0         -0.01000      0.0          0.0          0.0          0.0
 35    0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0
 36    0.0          0.0          0.0          0.0          0.0          1.00000     -1.18000      0.0          0.0          0.0
 37    0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0
 38    0.0         -1.00000     -1.00000      1.00000      1.00000      0.0          0.0          1.00000      0.0          0.0
 39    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0
 40    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
 41    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000
 42    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 43    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 44    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 45    0.0          0.0          0.0          0.0          0.0       -376.21100      0.0          0.0          0.0          0.0
 46    0.0          0.0          0.0          0.0          0.0         -4.44520      0.0          0.0          0.0          0.0
 47    0.0          0.0          0.0          0.0          0.0          0.99470      0.0          0.0          0.0          0.0
 48    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 49    0.0          0.0          0.0          0.0          0.0          0.0         -0.51550      0.0          0.0          0.0
 50    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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A MATRIX

	31	32	33	34	35	36	37	38	39	40
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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A MATRIX                                                                                                                     PAGE 15
               31            32            33            34            35            36            37            38            39            40
101    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
102    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
103    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
104    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
105    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
106    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
107    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
108    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
109    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
110    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
111    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
112    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
113    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
114    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
115    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
116    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
117    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
118    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
119    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
120    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
121    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
122    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
123    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
124    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
125    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
126    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
127    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
128    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
129    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
130    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
131    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
132    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
133    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
134    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
135    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
136    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
137    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
138    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
139    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
140    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
141    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
142    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
143    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
144    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
145    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
146    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
147    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
148    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
149    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
150    0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0           0.0
```

```
A MATRIX                                                                                                   PAGE 16
              31          32          33          34          35          36          37          38          39          40
151   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
159  -1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

```
A MATRIX                                                                                                         PAGE 17
              41           42           43           44           45           46           47           48           49           50
   1    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   2    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   3    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   4    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   5    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   6    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   7    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   8    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   9    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  10    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  11    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  12    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  13    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  14    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  15    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  16    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  17    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  18    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  19    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  20    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  21    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  22    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  23    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  24    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  25    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  26    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  27    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  28    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  29    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  30    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  31    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  32    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  33    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  34    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  35    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  36    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  37    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  38    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  39    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  40    0.0          0.0          0.0         -1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  41    1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  42   -1.00000      1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  43    0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
  44    0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  45    0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0
  46    0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0
  47    0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0
  48    0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0
  49    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0
  50    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
```

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A MATRIX                                                                                       PAGE 18
                41          42          43          44          45          46          47          48          49          50
 51       0.0         0.0         0.0         0.0        -1.00000    -1.00000     1.00000     1.00000     0.0         0.0
 52       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 54       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 55       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 56       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 57       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 58       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 61       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 62       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 63       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 64       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 65       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 66       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 67       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 68       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 69       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 70       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 71       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 72       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 73       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 74       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 75       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 76       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 77       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 79       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 82       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 83       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 84       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 90       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 93       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 94       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 95       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 96       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 97       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 98       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100       0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                PAGE  19
             41        42        43        44        45        46        47        48        49        50
 101       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 102       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 103       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 104       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 105       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 106       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 107       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 108       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 109       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 110       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 111       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 112       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 113       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 114       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 115       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 116       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 117       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 118       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 119       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 120       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 121       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 122       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 123       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 124       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 125       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 126       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 127       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 128       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 129       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 130       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 131       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 132       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 133       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 134       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 135       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 136       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 137       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 138       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 139       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 140       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 141       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 142       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 143       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 144       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 145       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 146       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 147       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 148       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 149       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 150       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

```
                                                                                    PAGE 20
A MATRIX
          41         42         43         44         45         46         47         48         49         50
151    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
152    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
153    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
154    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
155    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
156    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
157    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
158   -1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
159    0.0        0.0        0.0       -1.00000    0.0        0.0        0.0        0.0        0.0        0.0
160    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

A MATRIX PAGE 21

	51	52	53	54	55	56	57	58	59	60
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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                                                                                        PAGE 22
A MATRIX
      51         52         53         54         55         56         57         58         59         60
51    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
52    0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
53    0.0        0.0        1.00000    0.0        0.0       -1.00000   -1.00000   -1.00000   -1.00000    1.00000
54    0.0        0.0       -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0
55    0.0        0.0        0.0       -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0
56    0.0        0.0        0.0        0.0       -0.64000    1.00000    0.0        0.0        0.0        0.0
57    0.0        0.0        0.0        0.07454    0.0        0.0        1.00000    0.0        0.0        0.0
58    0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0
59    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0
60    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
61    0.0        0.0        0.0       -0.00810    0.0        0.0        0.0        0.0        0.0        0.0
62    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
63    0.0        0.0        0.0       -0.00960    0.0        0.0        0.0        0.0        0.0        0.0
64    0.0        0.0        0.0        0.0        0.0        0.0        0.0       -1.00000   -1.00000    1.00000
65    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
66    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
67    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
68    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
69    0.0        0.0        0.0        0.0        0.40800    0.0        0.0        0.0        0.0        0.0
70    0.0        0.0        0.0        0.38710    0.0        0.0        0.0        0.0        0.0        0.0
71    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
72    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
73    0.0        0.0        0.0        0.17858    0.0        0.0        0.0        0.0        0.0        0.0
74    0.0        0.0        0.0        0.01500    0.0        0.0        0.0        0.0        0.0        0.0
75    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
76    0.0        0.0        0.0        0.22000    0.0        0.0        0.0        0.0        0.0        0.0
77    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
78    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
79    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
80    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
81    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
82    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
83    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
84    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
85    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
86    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
87    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
88    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
89    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
90    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
91    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
92    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
93    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
94    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
95    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
96    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
97    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
98    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
99    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
100   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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A MATRIX                                                                                         PAGE 23
            51        52        53        54        55        56        57        58        59        60
101    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
102    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
103    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
104    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
105    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
106    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
107    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
108    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
109    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
110    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
111    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
112    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
113    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
114    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
115    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
116    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
117    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
118    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
119    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
120    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
121    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
122    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
123    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
124    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
125    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
126    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
127    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
128    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
129    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
130    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
131    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
132    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
133    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
134    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
135    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
136    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
137    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
138    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
139    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
140    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
141    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
142    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
143    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
144    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
145    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
146    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
147    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
148    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
149    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
150    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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A MATRIX                                                                                                PAGE 24
                51               52               53               54               55               56               57               58               59               60
151     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
152     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
153     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
154     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
155     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
156     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
157     0.0             0.0             0.0            -1.00000         0.0             0.0             0.0             0.0             0.0             0.0
158     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
159     0.0             0.0             0.0             0.0             0.0             0.0            -1.00000         0.0             0.0             0.0
160     0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0             0.0
```

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A MATRIX                                                                                     PAGE 25
             61           62          63          64          65          66          67          68          69          70
  1   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  2   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  3   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  4   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  5   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  6   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  7   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  8   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  9   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 10   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 11   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 12   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 13   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 15   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 16   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 17   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 18   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 19   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 20   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 21   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 22   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 23   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 24   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 25   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 26   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 27   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 28   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 29   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 30   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 31   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 32   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 33   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 34   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 35   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 36   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 37   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 38   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 39   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 40   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 41   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 42   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 43   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 44   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 45   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 46   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 47   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 48   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 49   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 50   0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                                                     PAGE 26
               61           62           63           64           65           66           67           68           69           70
  51   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  52   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  53   1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  54   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  55   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  56   0.0          0.0          0.02290      0.0          0.0          0.0          0.0          0.0          0.0          0.0
  57   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  58   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  59   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  60   0.0         -2.70000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  61   1.00000     -0.13000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  62   0.0          1.00000     -0.53000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
  63   0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
  64   1.00000      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
  65   0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0
  66   0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0         -1.00000     -1.00000
  67   0.0          0.0          0.0          0.0          0.0         -1.00000      1.00000      0.0          0.0          0.0
  68   0.0          0.0          0.0          0.0          0.0          0.0         -1.00000      1.00000      0.0          0.0
  69   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0
  70   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
  71   0.0         -0.36520      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  72   0.0          0.13490      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  73   0.0         -0.45360      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  74   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  75   0.0          0.0          0.71885      0.0          0.0          0.0          0.0          0.0          0.0          0.0
  76   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  77   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  78   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  79   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  80   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  81   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  82   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  83   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  84   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  85   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  86   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  87   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  88   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  89   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  90   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  91   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  92   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  93   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  94   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  95   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  96   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  97   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  98   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  99   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 100   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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A MATRIX                                                                                      PAGE 27
              61        62        63        64        65        66        67        68        69        70
101    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
102    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
103    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
104    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
105    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
106    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
107    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
108    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
109    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
110    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
111    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
112    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
113    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
114    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
115    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
116    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
117    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
118    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
119    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
120    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
121    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
122    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
123    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
124    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
125    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
126    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
127    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
128    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
129    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
130    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
131    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
132    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
133    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
134    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
135    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
136    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
137    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
138    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
139    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
140    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
141    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
142    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
143    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
144    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
145    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
146    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
147    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
148    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
149    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
150    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
```

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A MATRIX                                                                                          PAGE 28
                 61          62          63          64          65          66          67          68          69          70
151      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158      0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0
159      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000
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                                                                                              PAGE 29
 A MATRIX
              71        72        73        74        75        76        77        78        79        80
   1         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   2         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   3         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   4         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   5         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   6         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   7         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   8         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
   9         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  10         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  11         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  12         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  13         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  14         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  15         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  16         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  17         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  18         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  19         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  20         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  21         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  22         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  23         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  24         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  25         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  26         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  27         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  28         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  29         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  30         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  31         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  32         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  33         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  34         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  35         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  36         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  37         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  38         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  39         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  40         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  41         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  42         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  43         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  44         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  45         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  46         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  47         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  48         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  49         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
  50         0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
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                                                                                         PAGE 30
A MATRIX
       71        72        73        74        75        76        77        78        79        80
51     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
52     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
53     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
54     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
55     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
56     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
57     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
58     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
59     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
60     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
61     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
62     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
63     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
64     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
65     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
66    -1.00000  -1.00000   1.00000   1.00000   0.0       0.0       0.0       0.0       0.0       0.0
67     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
68     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
69     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
70     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
71     1.00000   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
72     0.0       1.00000   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
73     0.0       0.0       1.00000   0.0       0.0       0.0       0.0       0.0       0.0       0.0
74     0.0       0.0       0.0       1.00000   0.0       0.0       0.0       0.0       0.0       0.0
75     0.0       0.0       0.0       0.0       1.00000   0.0       0.0       0.0       0.0       0.0
76     0.0       0.0       0.0       0.0       0.0      -1.00000   0.0       0.0       0.0       0.0
77     0.0       0.0       0.0       0.0       0.0       0.0       1.00000   0.0       0.0       0.0
78    -1.00000  -1.00000   1.00000   1.00000   0.0       0.0       0.0       1.00000   0.0       0.0
79     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.00000   0.0
80     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -1.00000   1.00000
81     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -1.00000
82     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
83     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -2.05278
84     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
85     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
86     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -0.47370
87     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.00500
88     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
89     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -0.13450
90     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
91     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
92     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
93     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
94     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
95     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
96     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -1.80900
97     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
98     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
99     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0      -0.22180
100    0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.03470
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A MATRIX

	71	72	73	74	75	76	77	78	79	80
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24870
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
                                                                                                    PAGE 32
 A MATRIX
                  71           72           73           74           75           76           77           78           79           80
 151     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 152     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 153     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 154     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 155     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 156     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000
 157     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 158     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 159     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 160     0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

A MATRIX

	81	82	83	84	85	86	87	88	89	90
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A MATRIX

	81	82	83	84	85	86	87	88	89	90
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	1.00000	-1.00000	-1.00000	-1.00000	-1.00000	1.00000	1.00000	0.0	0.0	0.0
82	-0.25000	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.60404	0.0
83	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	-0.53000	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.01390	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	-0.14000	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	-0.02930	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0
90	0.0	0.0	0.0	-1.00000	-1.00000	1.00000	1.00000	0.0	0.0	1.00000
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.80149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.78815	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62956	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.31717	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A MATRIX PAGE 35

	81	82	83	84	85	86	87	88	89	90
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55869	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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A MATRIX
              81        82        83        84        85        86        87        88        89        90
151          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
152          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
153          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
154          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
155          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
156          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
157          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
158          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
159          0.0       0.0  -1.00000       0.0       0.0       0.0       0.0       0.0       0.0       0.0
160          0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
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A MATRIX                                                                                                        PAGE 37
           91          92          93          94          95          96          97          98          99         100
  1   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  2   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  3   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  4   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  5   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  6   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  7   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  8   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
  9   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 10   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 11   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 12   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 13   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 14   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 15   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 16   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 17   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 18   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 19   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 20   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 21   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 22   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 23   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 24   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 25   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 26   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 27   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 28   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 29   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 30   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 31   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 32   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 33   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 34   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 35   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 36   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 37   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 38   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 39   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 40   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 41   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 42   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 43   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 44   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 45   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 46   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 47   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 48   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 49   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 50   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
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                                                                                                PAGE 38
A MATRIX
             91         92         93         94         95         96         97         98         99        100
 51    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 52    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 53    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 54    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 55    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 56    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 57    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 58    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 59    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 60    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 61    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 62    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 63    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 64    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 65    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 66    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 67    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 68    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 69    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 70    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 71    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 72    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 73    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 74    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 75    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 76    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 77    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 78    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 79    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 80    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 81    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 82    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 83    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 84    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 85    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 86    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 87    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 88    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 89    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 90    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 91    1.00000    0.0        0.0        0.0       -1.00000   -1.00000   -1.00000   -1.00000    1.00000    1.00000
 92    0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 93    0.0       -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
 94    0.0        0.0       -1.00000    1.00000    0.0        0.0        0.0        0.0        0.0        0.0
 95    0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0
 96    0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0
 97    0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0
 98    0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0
 99    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0
100    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
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A MATRIX                                                                                                                     PAGE 39
              91           92           93           94           95           96           97           98           99          100
101      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104      0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000      1.00000      1.00000
105      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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A MATRIX                                                                                    PAGE 40
             91          92          93          94          95          96          97          98          99         100
151   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
158   0.0         0.0        -1.00000     0.0         0.0         0.0         0.0         0.0         0.0         0.0
159   0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
160   0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                        PAGE 41
            101        102        103        104        105        106        107        108        109        110
  1     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  2     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  3     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  4     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  5     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  6     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  7     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  8     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  9     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 10     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 11     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 12     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 13     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 14     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 15     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 16     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 17     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 18     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 19     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 20     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 21     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 22     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 23     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 24     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 25     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 26     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 27     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 28     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 29     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 30     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 31     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 32     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 33     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 34     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 35     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 36     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 37     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 38     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 39     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 40     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 41     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 42     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 43     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 44     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 45     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 46     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 47     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 48     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 49     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
 50     0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

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A MATRIX                                                                                PAGE 42
            101         102         103         104         105         106         107         108         109         110
 51  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 52  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 53  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 54  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 55  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 56  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 57  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 58  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 59  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 60  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 61  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 62  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 63  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 64  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 65  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 66  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 67  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 68  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 69  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 70  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 71  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 72  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 73  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 74  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 75  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 76  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 77  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 78  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 79  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 80  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 81  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 82  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 83  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 84  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 85  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 86  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 87  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 88  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 89  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 90  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 91  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 92  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 93  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 94  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 95  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 96  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 97  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 98  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
 99  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
100  0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                                         PAGE 43
            101          102          103          104          105          106          107          108          109          110
101   1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102   0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103   0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
104   0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0          0.0
105   0.0          0.0          0.0          0.0          1.00000      0.0          0.0         -1.00000     -1.00000     -1.00000
106   0.0          0.0          0.0          0.0         -1.00000      1.00000      0.0          0.0          0.0          0.0
107   0.0          0.0          0.0          0.0          0.0         -1.00000      1.00000      0.0          0.0          0.0
108   0.0          0.0          0.0          0.0          0.0          0.0         -0.40469      1.00000      0.0          0.0
109   0.0          0.0          0.0          0.0          0.0          0.16700      0.0          0.0          1.00000      0.0
110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112   0.0          0.0          0.0          0.0          0.0         -0.11000      0.0          0.0          0.0          0.0
113   0.0          0.0          0.0          0.0          0.0         -0.05000      0.0          0.0          0.0          0.0
114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115   0.0          0.0          0.0          0.0          0.0         -0.05000      0.0          0.0          0.0          0.0
116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000
117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121   0.0          0.0          0.0          0.0          0.0          0.0          2.19250      0.0          0.0          0.0
122   0.0          0.0          0.0          0.0          0.0         -0.39546      0.0          0.0          0.0          0.0
123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125   0.0          0.0          0.0          0.0          0.0          0.17429      0.0          0.0          0.0          0.0
126   0.0          0.0          0.0          0.0          0.0         -0.02709      0.0          0.0          0.0          0.0
127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128   0.0          0.0          0.0          0.0          0.0          0.15186      0.0          0.0          0.0          0.0
129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
132   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
134   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
135   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
136   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
137   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
138   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
139   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
140   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
141   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
143   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
148   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
150   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

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                                                                                              PAGE 44
A MATRIX
             101         102         103         104         105         106         107         108         109         110
151      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
152      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
153      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
154      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
155      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
156      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
157      0.0         0.0         0.0         0.0         0.0        -1.00000     0.0         0.0         0.0         0.0
158      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
159      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0        -1.00000     0.0
160      0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
```

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A MATRIX                                                                                   PAGE 45
             111          112          113          114          115          116          117          118          119          120
   1   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   2   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   3   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   4   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   5   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   6   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   7   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   8   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
   9   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  10   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  11   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  12   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  13   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  14   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  15   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  16   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  17   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  18   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  19   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  20   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  21   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  22   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  23   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  24   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  25   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  26   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  27   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  28   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  29   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  30   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  31   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  32   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  33   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  34   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  35   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  36   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  37   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  38   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  39   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  40   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  41   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  42   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  43   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  44   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  45   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  46   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  47   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  48   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  49   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  50   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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A MATRIX

	111	112	113	114	115	116	117	118	119	120
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A MATRIX

PAGE 47

	111	112	113	114	115	116	117	118	119	120
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	-1.00000	1.00000	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	-0.34000	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	1.00000	0.0	0.0	-0.05000	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	1.00000	0.0	0.91000	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	1.00000	0.01900	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	1.00000	-0.25218	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0
116	-1.00000	1.00000	1.00000	0.0	0.0	1.00000	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00000	1.00000	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00000	1.00000
121	0.0	0.0	0.0	0.0	-3.16037	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.26158	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	-0.07595	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	-1.62233	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	-0.30107	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
A MATRIX                                                                              PAGE 48
              111          112          113          114          115          116          117          118          119          120
 151   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 152   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 153   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 154   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 155   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 156   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 157   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 158   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000      0.0
 159   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 160   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

```
A MATRIX                                                                                         PAGE 49
              121        122        123        124        125        126        127        128        129        130
   1    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   2    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   3    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   4    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   5    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   6    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   7    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   8    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
   9    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  10    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  11    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  12    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  13    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  14    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  15    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  16    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  17    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  18    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  19    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  20    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  21    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  22    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  23    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  24    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  25    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  26    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  27    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  28    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  29    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  30    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  31    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  32    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  33    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  34    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  35    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  36    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  37    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  38    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  39    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  40    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  41    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  42    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  43    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  44    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  45    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  46    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  47    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  48    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  49    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
  50    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
```

```
A MATRIX                                                                                 PAGE 50
               121           122          123          124          125          126          127          128          129          130
  51    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  52    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  53    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  54    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  55    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  56    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  57    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  58    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  59    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  60    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  61    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  62    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  63    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  64    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  65    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  66    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  67    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  68    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  69    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  70    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  71    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  72    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  73    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  74    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  75    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  76    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  77    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  78    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  79    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  80    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  81    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  82    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  83    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  84    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  85    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  86    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  87    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  88    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  89    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  90    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  91    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  92    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  93    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  94    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  95    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  96    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  97    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  98    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  99    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 100    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

A MATRIX

	121	122	123	124	125	126	127	128	129	130
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	-1.00000	-1.00000	-1.00000	-1.00000	1.00000	1.00000	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000	0.0	0.0
129	0.0	0.0	-1.00000	-1.00000	1.00000	1.00000	0.0	0.0	1.00000	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00000
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
A MATRIX                                                                                              PAGE 52
              121          122          123          124          125          126          127          128          129          130
 151   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 152   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 153   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 154   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 155   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 156   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 157   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 158   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 159   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 160   0.0         -1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
```

```
A MATRIX                                                                                       PAGE 53
            131          132          133          134          135          136          137          138          139          140
  1    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  2    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  3    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  4    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  5    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  6    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  7    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  8    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
  9    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 10    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 11    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 12    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 13    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 14    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 15    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 16    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 17    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 18    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 19    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 20    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 21    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 22    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 23    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 24    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 25    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 26    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 27    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 28    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 29    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 30    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 31    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 32    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 33    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 34    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 35    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 36    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 37    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 38    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 39    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 40    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 41    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 42    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 43    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 44    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 45    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 46    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 47    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 48    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 49    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
 50    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
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                                                                                                        PAGE 54
A MATRIX
         131      132      133      134      135      136      137      138      139      140
 51      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 52      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 53      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 54      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 55      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 56      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 57      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 58      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 59      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 60      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 61      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 62      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 63      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 64      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 65      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 66      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 67      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 68      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 69      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 70      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 71      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 72      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 73      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 74      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 75      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 76      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 77      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 78      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 79      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 80      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 81      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 82      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 83      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 84      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 85      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 86      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 87      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 88      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 89      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 90      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 91      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 92      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 93      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 94      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 95      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 96      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 97      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 98      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
 99      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
100      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
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A MATRIX                                                                                                        PAGE 55
             131          132          133          134          135          136          137          138          139          140
101   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
102   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
103   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
104   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
105   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
106   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
107   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
108   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
109   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
110   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
111   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
112   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
113   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
114   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
115   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
116   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
117   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
118   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
119   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
120   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
121   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
122   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
123   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
124   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
125   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
126   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
127   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
128   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
129   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
130   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
131   1.00000      0.0          0.0         -1.00000     -1.00000     -1.00000     -1.00000      1.00000      1.00000      0.0
132  -1.00000      1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
133   0.0         -1.00000      1.00000      0.0          0.0          0.0          0.0          0.0          0.0          0.0
134   0.0          0.0         -0.39785      1.00000      0.0          0.0          0.0          0.0          0.0          0.0
135   0.0         -0.06519      0.0          0.0          1.00000      0.0          0.0          0.0          0.0          0.0
136   0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0          0.0          0.0
137   0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.0         -0.00800
138   0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.0          0.05816
139   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000      0.00480
140   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          1.00000
141   0.0          0.06000      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
142   0.0          0.0          0.0          0.0          0.0         -1.00000     -1.00000      1.00000      1.00000      0.0
143   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
144   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
145   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
146   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
147   0.0          0.0          2.94731      0.0          0.0          0.0          0.0          0.0          0.0          0.0
148   0.0         -0.11174      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
149   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          2.58500
150   0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.01251
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A MATRIX                                                                                               PAGE 56

            131          132          133          134          135          136          137          138          139          140
151      0.0       -0.54300      0.0         0.0         0.0         0.0         0.0         0.0         0.0        1.74354
152      0.0       -0.00200      0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
153      0.0        0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
154      0.0       -0.36630      0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
155      0.0        0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
156      0.0        0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
157      0.0       -1.00000      0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
158      0.0        0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
159      0.0        0.0          0.0         0.0       -1.00000      0.0         0.0         0.0         0.0        0.0
160      0.0        0.0          0.0         0.0         0.0         0.0         0.0         0.0         0.0        0.0
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A MATRIX PAGE 57

	141	142	143	144	145	146	147	148	149	150
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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                                                                                                   PAGE 58
A MATRIX
          141       142       143       144       145       146       147       148       149       150
 51       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 52       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 53       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 54       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 55       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 56       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 57       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 58       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 59       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 60       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 61       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 62       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 63       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 64       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 65       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 66       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 67       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 68       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 69       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 70       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 71       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 72       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 73       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 74       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 75       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 76       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 77       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 78       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 79       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 80       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 81       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 82       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 83       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 84       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 85       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 86       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 87       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 88       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 89       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 90       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 91       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 92       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 93       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 94       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 95       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 96       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 97       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 98       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
 99       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
100       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
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A MATRIX

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       141        142        143        144        145        146        147        148        149        150
101    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
102    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
103    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
104    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
105    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
106    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
107    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
108    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
109    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
110    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
111    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
112    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
113    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
114    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
115    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
116    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
117    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
118    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
119    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
120    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
121    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
122    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
123    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
124    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
125    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
126    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
127    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
128    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
129    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
130    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
131    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
132    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
133    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
134    -0.39000   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
135    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
136    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
137    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
138    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
139    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
140    -1.17778   0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
141    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
142    0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
143    0.0        0.0        1.00000    0.0        0.0        0.0        -1.00000   -1.00000   -1.00000   -1.00000
144    0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0
145    0.0        0.0        0.0        -1.00000   1.00000    0.0        0.0        0.0        0.0        0.0
146    0.0        0.0        0.0        0.0        -1.00000   1.00000    0.0        0.0        0.0        0.0
147    -4.13290   0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0
148    0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0
149    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0
150    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
```

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A MATRIX                                                                                                  PAGE 60
               141          142          143          144          145          146          147          148          149          150
151    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
152    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
153   -0.01876      0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
154    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000     -1.00000
155    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
156    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
157    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
158    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
159    0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0          0.0
160    0.0          0.0          0.0          0.0          0.0          0.0          0.0         -1.00000      0.0          0.0
```

A MATRIX

	151	152	153	154	155	156	157	158	159	160
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A MATRIX

	151	152	153	154	155	156	157	158	159	160
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A MATRIX

	151	152	153	154	155	156	157	158	159	160
101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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                                                                                                              PAGE 64
A MATRIX
            151        152        153        154        155        156        157        158        159        160
151    1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
152    0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0
153    0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0        0.0
154    0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0        0.0
155    1.00000    0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0        0.0
156    0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0        0.0
157    0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0        0.0
158    0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0        0.0
159    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000    0.0
160    0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        1.00000
```